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ABSTRACT

The report summarizes research and reported experience on day school care for severely mentally retarded children falling in the trainable range (IQ 25-50). Characteristics and numbers of such children, and literature reporting some methods and experiences in educating trainable mentally retarded (TMR) children are reviewed. Four public school TMR classes currently in operation in St. Paul and Minneapolis are described. Also summarized are available followup studies on TMR children documenting their adult status, including one detailed followup study done on children who attended St. Paul classes. Two chapters deal with studies conducted in Minnesota on the attitudes, hopes, and experiences of parents of TMR children. The subjects in one study consisted of parents of retarded children enrolled in the Minneapolis-St. Paul classes, while the other study surveyed only parents whose children were not in public school classes. A final discussion on the problems of day school care concludes that public day school programs for TMR children can be established and maintained, but also points out that evidence is inconclusive as to whether such classes represent the best or most valuable type of program. Summarized are divergent professional points of view and the reasons for them. (KW)

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Research Project No. 6

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A STUDY

of

PUBLIC SCHOOL CHILDREN WITH SEVERE MENTAL RETARDATION

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STATE DEPARTMENT OF EDUCATION

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A STUDY OF PUBLIC SCHOOL CLASSES FOR CHILDREN WITH SEVERE MENTAL RETARDATION

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M.C.R., R.E.E., J.R.K.

- FORWARD -

The research study which is reported herewith was undertaken and has been conducted in the interest of the education of children with serious mental retardation. Little has been known as to what could best be done or the most effective ways of doing it in helping them to learn the things they may be capable of learning.

The background and setting for a new type of public school class for mentally retarded children are set forth in Chapter I. This study attempts to utilize the experience derived from currently operated classes to help point the way to subsequent plans and procedures.

To the extent that the present report may seem critical of the programs described it should be realized that the intention is to be constructively critical. The people who have pioneered in the difficult venture of offering a school program for severely retarded children deserve only commendation for their efforts. It would have been easier to do less or nothing.

It is unavoidable that the several teachers now assigned to the Group II classes in the Twin Cities will be identifiable in some portions of the report. If they can bear this "spotlight" in good spirit, it is hoped the resultant satisfaction will be a stimulus to them and to others in finding ways of further serving the retarded child.

To all who read and study the following pages there should come some new light on this perplexing task. This may well be a beginning upon which a clearer and surer path may be carved in the future.

DEAN M. SCHWEICKHARD,
Commissioner of Education

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CHAPTER I

SEVERELY RETARDED CHILDREN IN MINNESOTA

In August, 1951, the Minnesota State Board of Education established procedures and standards for the organization of a new type of public school class for mentally retarded children.[1] The children to be served in these classes are variously referred to as middle-grade defectives or as severely retarded. In IQ they fall within a range from about 25 to 50.

The states of California, Ohio, Pennsylvania, and Wisconsin have very recently authorized similar classes and many cities have acted independently to establish public school programs for these severely retarded children. Although many factors have contributed to this interest in public school provisions for these children, the basic stimulus has come from a rapidly growing Parent Organization.

Teachers and school administrators have very little guidance in meeting this new challenge. Little research has been directed specifically to the problems of day school education for these youngsters and only very recently have schools with experience in special classes at this level begun offering summaries of their programs. Groups undertaking the development of such a program are faced with this paucity of information and conflicting opinions concerning the desirability of establishing such classes. This report does not attempt to render a decision as to the desirability of the classes; rather, it has been prepared to make available the thinking and research of people who have met this problem at first hand.

The report attempts first to describe and estimate the number of children with whom there is concern. There is then, a brief summary of plans which have been devised for the education of severely retarded children. A separate chapter is given to description of classes for severely retarded children in St. Paul. These classes, called Group II classes in Minnesota State Standards, were started in 1934 as a WPA project, but were taken over by the St. Paul Board of Education in 1937. They have been in operation continuously since 1934. It was felt that the experience accumulated during the many years in St. Paul, as represented in their present program, would be especially pertinent for those who face this new school problem in Minnesota communities. There have been several classes organized in other parts of Minnesota very recently and some descriptive information is included about one of these newer classes.

A further chapter of the report summarizes such follow-up studies as are available on severely retarded children. The aim in that chapter is to bring together information on the adult status of these handicapped children. Particular emphasis is given to a rather detailed follow-up study done on children who attended St. Paul classes. As a final part of the report there is a summary of two studies done within Minnesota on attitudes, hopes and experiences of parents of these retarded children.

Characteristics of Middle-Grade Defective Children

As used in this report, the term "middle-grade defective" refers to a child who receives a valid intelligent quotient between twenty-five and fifty on the Stanford-Binet or other standard individual intelligence tests. The term "severely retarded" is used with the same meaning. Such youngsters will be expected to have a mental age of not more than seven and a half years nor less than three and a half years at maturity. Although a "summarizing definition" in terms of IQ leaves out the important criterion of social competency on which final diagnoses of mental deficiency must rest, the IQ does provide our most accurate prediction of adult status for severely retarded children of chronological age six or more.

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[1] *See Appendix A for a copy of the standards.*

A more descriptive definition of the middle-grade defective is provided in British Law as follows: "...persons in whose case there exists from birth or from an early age, mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves and their affairs, or in the case of children, of being taught to do so." Tredgold's definition differs slightly, as follows: "...one who, by reason of mental defect, existing from birth or from an early age, is incapable of earning his own living, but is capable of guarding himself against common physical dangers" (57). 58

The American classification of the middle-grade defective is usually made on the basis of IQ or Mental Age. The upper limits range from MA[2] eight (Goddard, 24, p. 581) to MA six or seven according to Pintner (46 p. 589). Doll describes middle-grade defectives as "Those children who can attend to their physical needs, and who under training can learn to perform very simple occupational tasks, but who do not progress in academic work beyond the second grade under the best methods of instruction. At maturity they require more or less constant supervision because they are incapable of independent social and economic adjustment except under the most favorable conditions.....Their IQ's will be below 50 and their mental ages below eight years" (16, p. 450)

Of their ability to learn Goddard says, "Those who test (mental age) six or seven have never succeeded in getting anywhere with the 3 R's. (24, p. 577). It is Wallin's experience (63) that very few of them do satisfactory first grade work even after six or seven years in school. Channing (10) and Durling (17) report that the adults they studied who had IQ's below 50 had a median school achievement of 2nd grade. Tredgold (58) mentions the following as samples of the abilities of medium-grade defectives. They can be taught to understand and protect themselves from common physical dangers. They can do simple routine tasks. They can care for themselves physically without supervision. They are unable to read more than one syllable words or spell more than a two or three letter word. They can do very small unit addition and subtraction (numbers under 10). They can name common objects and say what they are used for but not describe them. They can tell their own name and whether it is morning or afternoon and winter or summer.

Physically they are a varied group. Some are attractive and of normal appearance. Others belong to the special clinical types. At least 70% of Cretins are of middle-grade (62) and 61% of Mongoloids were so classified in a study by Brousseau and Brainerd (46). Cerebral Palsied children, Microcephalics, Hydro-cephalics, brain-injured children and some of the rarer clinical types are often of this ability level. As a consequence of these varied etiological conditions, their motor skill and control and physical strength, irrespective of intelligence, also show wide variations.

Almost all of these children have speech defects. A study by Sirkin and Lyons (55) shows that only 26% of a group of these children were able to respond satisfactorily to speech therapy. Dayton (4) reported that the death rate among middle-grade defectives is 2 to 2½ times as great as among normals. This is probably due partly to their lesser ability to care for themselves and partly to the greater number of physical defects and generally inferior constitutions which they have.

Emotionally they are childlike and immature, in keeping with their mental ages. Beyond this many of them can be separated into one of two types, called by Tredgold (58) the "stable or apathetic" and the "unstable or erratic." Recent study has indicated that some of these unstable children are brain-damaged and that their education should be of a quite different nature than for the apathetic child, who needs stimulation to arouse his interests. This fact has important implications for the establishment of educational programs for these children.

They are less often delinquent than brighter defectives. A study of institutionalized defectives by Porteus (63), for example, showed that those with IQ's below 55 have a record of only half as much delinquency as those with higher IQ's. They are, therefore, a less direct menace to the community in terms of anti-social behavior trends.

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[2] *MA — Mental Age*

The Number of Children Involved

Tredgold (58) reports that middle-grade defectives comprise 20% of all mental defectives. The total number of mental defectives in the United States in 1946 was estimated at between one and one-half and two million (40). Simple arithmetic then gives us between 300,000 and 400,000 middle-grade defectives. Even allowing for the high mortality rate among this group, their number is far greater than present institutions can care for. In 1946 there were approximately 90,000 defectives of all grades in institutions in the United States (40). Institution facilities have increased in very recent years, but so has the general population and consequently the number of defectives. Many institutions are already overcrowded and nearly every institution has a long waiting list. Consequently, a large proportion of these seriously retarded children are now, and by necessity will remain, in their communities at least for the foreseeable future.

Although Minnesota, compared with other states, has done relatively well in providing institutional facilities for mentally defective children, there has nevertheless been disgraceful failure to provide adequately in terms of the need. Waiting lists for institutional placement still run consistently into the hundreds.

Even if a sufficient number of public school classes was available, not all middle-grade defectives would be placed in such classes. Many would stay at home or be placed in public or private residential schools. Experience with the classes in St. Paul provides one way of estimating the number of children who might enroll in public schools. Using the number of pupils currently enrolled and the number on an official waiting list for the Group II classes in St. Paul as basis for extra population yields an estimated number of about 1,000 children for the entire state. Since we have no way of knowing how many eligible St. Paul children are not on the waiting list, this estimate for the state represents a minimum number of potential candidates for the classes.

Hill (31) estimates that perhaps one-half of one per cent of the school age population might profit from special training programs for the severely retarded. This basis for estimating the number of children involved in Minnesota produces a figure approximating 3,000. From the two estimates, then, it seems reasonable to suppose that the population eligible for these special classes for the severely retarded in Minnesota lies somewhere between 1,000 and 3,000. Although very small communities will seldom have enough youngsters of limited ability to establish these special training classes, additional opportunities may be provided through consolidation of school districts. Hill suggests that cities or school districts with a total population of 10,000 might expect to include a maximum of 10 severely retarded children. Since some of these will be enrolled in private and institutional schools, Hill judges it unlikely that school districts serving a population smaller than 10,000 will be able to justify provision of the special training facilities.

Summary

Minnesota, along with several other states, has recently authorized public school classes for severely retarded children. The potential population for such classes in the State of Minnesota probably lies somewhere between 1,000 and 3,000 children. In ability, physical attributes, and temperament these children are a varied lot. They fall somewhere within the lowest one per cent of the general population with respect to learning ability and in the past have been excluded from the public schools. The present report attempts to summarize such research and experience as is recorded on the problems of day school care for these children.

CHAPTER II

EXPERIENCES IN EDUCATING THE SEVERELY RETARDED CHILD

Itard's attempt to educate the Wild Boy of Aveyron (33) is the first recorded experiment in the education of the severely mentally retarded. This boy was found wandering wild in the forest. When brought into captivity he was pronounced mentally deficient by the leading Paris physicians of the day. Itard, however, believed that his retardation resulted from a lack of human contact and spent four years in varied but intensive efforts to make the boy normal. Although the experiment was a failure from the point of view of making the boy like other children of his age, Itard's work stimulated interest in the problem and demonstrated that a severely retarded child can be trained to become more socially acceptable. Many of his methods and devices are still in use today in training the mentally retarded, and have furnished the basis for more elaborate educational systems. Itard was a sensationalist and therefore submitted the boy to various stimuli, believing that this would increase his mental powers. Eventually, Victor, as the boy was named by Itard, was able to make simple discriminations, but when the task became too difficult for him he went into a rage. The tasks set for him included matching cardboard figures of different colors and shapes, matching letters of the alphabet, encouraging him to dress himself in order to keep warm, showing him a printed word and the object that it named and requiring him to form this word when he wanted the object, etc. During the first nine months of his training, Victor made remarkable progress in discarding his wild ways and responding to human affection. During the remainder of the four years he seemed to learn very little. He never spoke more than a few words, showed very little abstract ability and recognized only a few written words by rote. Itard's experiment indicates that while intensive training brings vast improvements in behavior, perhaps especially conspicuous in this case because of Victor's complete lack of training, it does not raise the mental capacity of a defective. Victor responded well until the limits of his ability were reached. Beyond this, no amount of effort to educate him increased his accomplishments by any appreciable degree.

Seguin was a pupil of Itard's and was much impressed with the behavior changes that had occurred in Victor. He received permission to establish classes for severely retarded children in Paris. His educational methods were an extension of Itard's. His thinking has had a profound effect on all subsequent teaching of the mentally retarded. His main emphases were on the physiological method and moral treatment. By the physiological method, Seguin hoped to develop the mind through the training of the physical senses. "Whatever we have been teaching and whatever instruments and means we were employing for that object, our method proper has been founded upon one principle, comparison" (54) of stimuli received by the senses. The physiological method is intended to train activity, intelligence and will and to bring them into balance. The aims of the moral treatment are stated as follows: "When we try to socialize the isolated (defective), we do not mean to teach him such things as reading and music; we mean to make it possible for him to sense and to know the power of establishing within the limits of his capacity, social relations, 'rapports sociaux', whose ever changing scale is expressed by two fixed words, rights and duties" (54).

Basic to all of Seguin's training was voluntary immobility. He trained the child to achieve voluntary immobility by placing a dumbbell on his hand until he was able to keep it still without restraint. Seguin taught walking first by passive exercise, then by teaching the child to stand on blocks. To teach the child to use his hands, he was placed on a ladder which he had to grasp to prevent a fall. He learned to place pegs in holes, pick up small objects, lace shoes, and thread beads. The pupils imitated the teacher's movements such as raising one arm, turning the head, or moving the fingers.

The purpose of sense training was to improve sensory capacities and perception, thus creating conditions for broader and clearer knowledge of the physical world. Exercises used for these purposes included handling of objects of different textures, temperatures, and sizes, distinguishing between them, and training in recognizing different musical and speech sounds. Sight training included having the child watch moving lights in a dark room, matching games, and imitative block building. Hand training involved the use of scissors, imitative line drawing and letter making. As the child progressed, more difficult tasks were introduced. He was asked to copy syllables and words. Words like 'bread', 'apple', and 'book' were matched with the objects that they named.

The purpose of moral training was to teach the child to understand and obey commands. Seguin pointed out that punishment was useless unless the child knew why he was being punished. He also stressed the use of rewards. Requests should be made in a proper manner and should not be beyond the child's ability. These requests should be enforced so that the child would form the habit of obedience. The child should be taught the value of work and all that he does should be purposeful. For example, the walks that he takes should be for the purpose of gathering something or seeing something.

Seguin was very specific in describing the physical set up that he considered desirable for training these defective children. His training program took place in an institution where there were many rooms and much equipment. Each training day consisted of three hours of direct and three hours of indirect teaching. The indirect training included observation of others and general training. He suggests these maxima for class size:

5 in exercises of attention
8-10 in sense and speech training
4-5 in drawing, writing, and reading
6 in object naming and counting

Another French educator, Descoeudres, has contributed heavily to present-day educational methods for the retarded. Although she believes that middle-grade defectives should be institutionalized, she apparently had some such children in her school. Her book, The Education of Mentally Defective Children (15), is still an invaluable aid to any teacher of severely retarded children. It is filled with specific suggestions about teaching material. She believed that the ideal training for a teacher of these children should include (1) scientific training, including psychiatry, psychology, special pedagogy, school hygiene, orthopedic treatment, anatomy, physiology of speech organs, treatment of speech defects, knowledge of laws and of institutions for the defective; (2) technical training in handwork; (3) practical training in special classes or institutions.

She stated five general educational principles:

1. Use the natural activity of the pupil. The child must do things for himself. Give maximum freedom compatible with good discipline.
2. Perceptual and sense training.
3. Correlation of subjects in their natural groupings, the association of ideas.
4. Individualization.
5. Utilitarian teaching.

Some of Descoeudres' ideas for teaching games came from Decroly; others she created as the need arose. Examples of her training games are listed below.

Visual - lotto, matching different colors and shapes.
Hearing - recognizing from sound what object has been dropped.
Touch - classifying objects as rough or smooth.
Taste and smell - recognizing different foods by these means.
Physical training - exercises, walking, marching, carrying bowls filled with water, hand exercises.
Handwork - dressing self, lacing shoes, peeling fruit, threading beads, simple weaving, gardening, drawing.
Object lesson - compare apples and pears for look, smell, taste, touch. Study growth of each, make models of each, draw and find stories about each.
Speech - make child want to talk. Exercises.

Reading - Use of little boxes containing objects with the name on the lid. She believes that a mental age of seven is desirable before the teaching of reading proper is begun.

Arithmetic - reproduce a certain number of taps, stringing beads, following oral directions as to number.

Moral Training - "We place moral training above the inculcation of knowledge." (15). The teacher's example is most important. The teacher must be patient, firm and kindly.

With the rise of American institutions some changes in emphasis in the education of the mental defectives were observed. In the very early American years the aim of much of education had been to get children to the point where they could learn academic subjects. Goddard, in particular, contended that this was undesirable. He argued that even if, after years of effort, the child mastered, by rote, some of the basic facts of the "three r's", he was so limited that he could never put them to practical use. Emphasis was shifted to practical training: handwork, sewing, shopwork, simple household chores, and self-care. This type of training is still given major emphasis in most public institutions for the mental defective. There is renewed interest in finding more effective ways of educating retarded children, however, and a few of the recent and most relevant studies concerning programs in institutional and public school settings are reviewed below.

The Woodward Iowa State School conducted a seven-week experiment (29) with nineteen severely retarded children (a few with IQ's below 25) to see if improvements could be made in several areas. The training activities included throwing and catching a ball while calling out the names of other pupils in the game, learning the names of colors, stringing beads in color, making color patterns, and throwing bean bags and balls into a container. At the start of the experiment six of the subjects had no speech, thirteen had poor muscular control, and seven had very poor language comprehension, and ten were poorly adjusted socially. At the end of the experimental period, two showed no improvement, five showed slight improvement, and twelve showed real improvement in social adjustment, color learning, motor control, and general alertness. Those who showed the least improvement were the oldest members of the group and the author concluded that youth improves a child's chances of benefiting from this type of training.

Vesta Jones (36), writing of her experience in a private school, cites some unusual results obtained with a group of 36 girls, whose IQ's ranged from 55 to below 30. All but three had IQ's below 50. She started her training with 'Behavior Conformity', which consisted of hands quiet, eyes on teacher, speaking distinctly, correct posture, pleasing appearance, courteous obedience and completion of the task at hand. She then progressed to the 'Basic Mechanics of Learning'. The first of these Mechanics was basic speech, reading and phonics. The child with a mental age of three or four began to read during the seventh or eighth month of her stay at the school. As for writing, sixteen of the nineteen girls, with mental ages of four, composed letters to their homes. In geography, these girls could identify continents, oceans, most seas, all nations and many islands. Her most advanced class included 8 girls whose average age was nineteen. Two of these girls had mental ages of five, two MA six, two MA seven, and two MA eight. These girls had been taught for eight to twelve years. Their curriculum was composed of literature, using a seventh grade text, discussion of current events, world geography, constitutional democracy (she commented, "This is slow going") and arithmetic. She reports the average achievement of the eight girls as 5th grade level in these subjects.

Miss Jones' results are very strikingly at variance with those of most other educators. She goes beyond the very optimistic results reported by Schmidt (53). Her reporting of the educational methods used and the tests used in rating these girls is not too clear, however, and these points should be clarified. If her results can be established as valid, her methods should certainly be studied by other educators of the mentally retarded.

Dyor and others report a home teaching project for non-institutionalized children with IQ's between 20 and 50. The Massachusetts State Schools and the Boston School of Occupational Therapy cooperated to develop a plan and materials for home training, which was actually done by the mothers. The lessons were made up to fit the individual child and were similar to work done in state school classes. It was found that the success of this training depended on the attitude and interest of the mothers, who had to devote one hour a day to the program. It was found that having a social worker come into the home helped solve many other problems than the immediate one of the child's education. The authors state that the cost per person per year in a state institution at the time of this study, 1938, was $450 while the cost of the community supervision program was $30 (18).

The intensive treatment of an encephalitic boy with an IQ of 38 is reported by Martinson and Strauss (44). The object was to see if his social adjustment could be improved and his rate of mental growth increased. He was trained for a year and a half, with an hour a day of individual instruction and an hour and a half of supervised activity. A finger abacus and group of dots were used to teach him to count. At the end of the training period he could count to 50, add up to 10, and recognize numerals to 30. He was taught to read by the story method and got through two preprimers and half a primer. He was also trained in conversation by retelling stories. He showed the most progress in manual training which consisted of work with clay, hammer and nails, cutting out pictures, weaving and woodworking. Picture puzzles were also used for training in visual perception. At the end of the training period his IQ had risen from 38 to 42. His social maturity quotient rose from 33 to 49.

The Southern Wisconsin Colony and Training School (28) has set up a training program with possible implications for community day classes. Since this is one of the most thorough and relevant studies it will be reviewed at length. The program was studied by thirty-five professional people to assess its applicability to the community. It was planned to serve children of ages eight through sixteen, with mental ages three and a half to eight and IQ's 30 to 50. The professional people drew up these criteria for selection of children for training classes.

1. Physical - The child should be able to see, hear, walk, have some control over toilet habits and should not drool excessively.

2. Mental - A minimum MA of 3 to 3½ and an IQ of at least 25. He should have sufficient speech to make his wants known.

3. Social - He should not be over-distractible and should show some respect for the dangerous situations that may occur on the way to and from school. He must respond to group stimulation and must not have too many anti-social behavior problems.

4. Emotional - He must be reasonably stable.

5. Educational - He must react to learning situations and stimuli.

The objectives of the program are:

1. To teach the child to care for his daily physical needs.
2. To teach the child to live with other children.
3. To develop the child's capacity to the fullest so that he may more adequately carry on activities in his limited environment.
4. To teach the child to play and be happy.

A curriculum was established and used for six months; then it was revised in the light of experience. Roewer (51) describes the curriculum and offers some evaluation of its effectiveness at the end of the six-month period as follows:

Daily Training Activities

1. Health Activities
   (a) The establishment of a definite routine for self-care. The children wash their hands, comb their hair, and clean their teeth in class every day. They are taught when, where, and how to use the toilet, how to manage their clothes and the use of soap, wash cloth, and towel.

(b) Understanding methods of eating. When, where, and how much to eat. They have daily lunch periods and one regular meal a month in class.

(c) Understanding need for good posture. Sleeping, standing, and sitting posture are taught in class and in the cottage.

2. Personal Grooming

The proper methods and the importance of the care of clothes. Fundamental processes of dressing. Improvement of appearance with a clean healthy body. Success in this last area was varied.

3. Safety

Make the child safety conscious. Acquaint the child with the factors in safety. Health and comfort related to good safety habits. Interest in his own and his neighbor's safety. These proved to be too abstract and were handled as specific situations arose.

4. Attitudes

Practice good manners. Consideration of others. Respect for authority. Responsibility for self. Realize his own limitations and adjust to handicap. The last objective requires insight and was seldom attained.

Diversional Activities

These activities for enjoyment and release from routine. They included how to play, how to get along with others, and how to be happy. Included were arts, crafts, physical activity, music, and nature study. In general the most elementary activities were the most successful and the most pleasing to the children.

Number Development Activities

"This portion of the curriculum as well as the next (oral and written language) proved to be quite unrealistic." (51, p. 555). The original objectives were to establish the number concepts 1 to 12, to teach the children to recognize coins, to teach the value of time and how to read the clock, to teach him to understand quantity and its relationships. They found that at this mental level the number concepts rarely exceeded five and that time was not a comprehensible concept to the child.

Oral and Written Language

1. Oral

To provide for self-expression and self-confidence. To improve speech. To develop ability and willingness for group participation. To improve visual and auditory discrimination. To provide a wider vocabulary. The activities included telling stories, experiences and news, dramatic play, choral speaking and reciting rhymes. The authors felt that the objectives of the oral language program were worthy goals but that progress would usually be very, very slow.

2. Written

To develop small muscle control, hand and eye coordination and writing skills. Activities planned to include writing name, address, date and copying. It is reported, "to date written language is virtually nonexistent. None of the children in existing trainable groups can write his name from memory. Copying of material is achieved by many, but the value is probably chiefly therapeutic with doubtful educational significance" (51, p. 557).

This program is being tried on three groups of eight pupils each at the training school. The groups are divided by age. Group 1 includes ages six to nine, group 2 ages nine to thirteen, and group 3 ages eleven to fifteen. The two younger groups include mental ages of approximately three to five and the older group three and one half to eight. The classes are taught by two teachers, a man and a woman, both of whom have had special educational training. Each group meets for an hour and a half daily. Thirty minutes are spent on Daily Training, thirty minutes on Diversional Activities, and thirty minutes on Number and Language Activities. The teachers felt that chronological age affected the results of training. The youngest group learned the most, with the greatest facility, while the older group seemed to have set habits that were not noticeably altered by the six months of training. Summarizing the results, the authors say, "In general revisions were made in concepts. Concrete manipulative activities were deemed successful. Activities requiring judgment, abstract thinking or conceptualization were believed to be virtually meaningless" (51, p. 558)

When evaluating the contributions that this experiment could make to community planning, the professional people agreed that, "By training the child of intelligence quotient of 30 to 50, physical and emotional burdens can be minimized in home-care situations. In the community social burdens may be somewhat alleviated; and in institutions financial and personnel problems may be somewhat relieved" (51, p. 559). But they feel that, "The child of middle-grade or lower intelligence does not generally benefit enough from academic experience to warrant the amount of time consumed. That is, academic education does not seem to contribute adequately to solving the basic human problem of self-sufficiency at the lower levels of intelligence." (51 p. 551). However, it was felt that the subacademic child could profit from other kinds of training.

Engel (20) reports on the adjustments of 58 pupils with IQ's below 50 in public school special classes in Detroit in the school year 1938 - 39. The median achievement of this group was at the third grade level. The highest individual achieved at grade 4A. The socio-economic status of these children's homes was higher than that of retarded children of higher ability. Engel explains this on the basis of an artificial selective factor: parents of the children had to furnish transportation and the poorer families could not afford the time or the money required to do this. In this connection it should be noted that Paterson and Rundquist, when making comparisons within the retarded group, have found an inverse relationship between IQ and father's occupational status (48). Thus the Detroit findings may well be due to more than the selective factor of being able to furnish transportation.

Under the direction of Wallin, Missouri has had day school classes for low IQ groups for some time. Little has been published about the training methods employed, however. Wallin reports the following cases as typical of children in the low IQ classes (63, p. 226)

1. IQ 44. At age 13 has been to school 5 years. Reads, "I can run" as "I see --k--." Could not spell cat or rat. Added 1 and 1 but not 2 and 2. Could not write or count up to five. Wrote figures to 4. Poor in handwork.
2. IQ 46. Age 10-7. After three years in school made some progress in manual training, read a few familiar words and could copy words.
3. IQ 43. Age 15-5. No ability in woodwork, raffia, or gardening. Very crude in writing and drawing. Fair at knitting and washcloths. About 1st grade in spelling and reading. Was interested in oral language work but was flighty in expression. Could count beyond 100. Could recognize and write numbers and solve very simple problems. Could march in step.

The Walter E. Fernald State School of Boston (21), at the request of a group of mothers, set up a day class for children living in their own homes. The class was made up of 16 children ranging in age from six to fifteen with the mental ages of 3-2 to 5-4 and IQ's of 21 to 53. At first the children went to school from 1:45 to 3:45 daily. The teachers found that the group was too large and the mental age range too great. Therefore those with mental ages below four went to school two days a week and others three days. They found that the younger children needed more individual attention but less stimulation than the older group. The program for the younger group stressed sensory and habit training. The two-hour training period was spent as follows: (See next page)

Take off outer clothing, toilet, get to seats
Greeting, prayer
Block building, using colors
Free play, toys, books
Speech training - e.g., Mother Goose
Toilet
Hand training - e.g., scissors
Games - e.g., ball and bean bag
Stories and picture books
Toilet
Dismissal

The older group was more restless and harder to motivate than the younger pupils. Their training included sense training, kindergarten activities, and some very elementary reading, writing and arithmetic on visual, kinaesthetic and play basis. Progress was very slow in these areas. Their program included:

Putting away wraps, toilet, taking places
Greeting, prayer, flag salute, "America"
Music, hymns
Object lesson - e.g., domestic animals
Recognition and repetition of animal sounds
Weaving
Matching words and pictures
Physical training - e.g., walking balancing beam, use of ladder and steps
Bowling
Toilet
Dismissal

The authors summarize the results of the training thus: "The gain has been remarkable, not so much in academic accomplishment - but in social behavior and adaptability to group requirements" (21). The children were less restless and distractible and showed some constructive activity at home. Benefits for mothers, as a result of their meeting each other and discussing common problems, were also noted.

One of the most controversial educational experiments is that reported by Bernardine Schmidt (53), on special class pupils in Chicago. Her findings are too well known to need extensive review. She used five classes, three as the experimental group and two as controls. From her figures, apparently about half of the experimental group had IQ's below 50. The controls were of somewhat higher ability. The educational goals included:

1. The development of desirable personal behavior including neat dress and grooming, self-responsibility, diet, rest, recreation and general usefulness.

2. Improvement of academic ability - reading at fourth grade level, legible writing, spelling at fifth grade level, the four basic arithmetic processes and percentages, fractions and decimals plus practical application of these processes.

3. Manipulative arts - use of tools and household appliances, simple electrical repairs, cooking, sewing, arts and crafts.

4. The improvement of work and study habits such as time schedules, suitable tools and places for work and ability to accept criticism and directions.

5. Occupational information - knowledge of suitable occupations in the neighborhood, trips to places of business.

6. Pre-employment experience - use of want ads and employment services. Purpose of social security wage-hour laws and health and safety regulations.

This appears to be a formidable program for children of the mental level she describes. She has not reported in detail the actual teaching methods used. For the experimental group, she reports a change in the Vineland Social Quotient over a period of three years from a mean of 59.4 to 91.8. The Stanford Binet IQ over the same period is reported to have been raised from a mean of 52.1 to 71.6. Part of the group was retested later and still further increases were reported. Eighty-eight pupils are reported as being of imbecile level at the outset of the training and only three are so classified at the end of the study. Some members of the group were no longer included in the study, however. She reports phenomenal occupational and educational achievements for these children after they left the special classes. Their emotional and social adjustments are reported to be above average.

Schmidt's findings, if they were substantiated through replication of her experiment, would truly be a milestone in the education of retarded children and would revolutionize thinking about their potentialities. Her work has come in for some very serious criticisms, however, especially by Kirk (38). These criticisms include the fact that some of the children included in this study were not actually classified as defective, that their original IQ's were not nearly so low as reported by Schmidt, that there are substantial errors of calculation in her computations, that the number of subjects in the experiment did not remain constant and no description of those who disappeared was given, etc. In addition, her control groups were not truly matched with the experimental groups, some of the tests that she reportedly gave (e.g., Bernreuter) could not possibly have been validly administered to children of as low intelligence as she originally reported her group to have been. In summary, it appears that her reporting is so open to such serious criticism as to cast grave doubts on the validity of the results.

Meta Anderson in her book The Education of Defectives in the Public Schools (2) reports on the training program used for severely retarded children in the Newark, N. Y. schools in 1922. This book includes many specific teaching suggestions and would be useful to present-day educators setting up a curriculum for severely retarded children. The author advocates that these children be housed in separate buildings instead of in special rooms in the same building as normal children. Her program for the severely retarded with mental ages of three and four includes:

1. Personal cleanliness - wash and bathe in school
2. Sense training
3. Manual training - crude work using the big muscles, use of hammer and nails, scissors, needle, and beginning weaving
4. Exercises of practical life - sweeping, dusting, scrubbing, etc.
5. Physical training - rhythm work such as in skipping, running, simple dances, gym apparatus work, stair climbing
6. Music - rote songs with action
7. Speech training - simple stories

She notes that while the results obtained with this group are crude, the improvements in the children are marked.

The training of the children with mental ages from five to seven is organized on a departmental plan as follows:

The Kitchen	These children wash dishes, wash and iron simple pieces, clean smaller stoves, polish counters, and help prepare lunch
The Shop	Make simple boxes, toys, tables, brooms, magazine racks, and such
The Gymnasium	Rhythm work, apparatus work, folk dancing and games, drills
Music	Songs

Manual Training	Basketry, brushmaking, rugmaking, sewing, chair-carving
Academic Work	Anderson feels that this is not very important with defectives as they cannot use it intelligently. Language is the most important academic subject to teach. Some reading, writing, and spelling are taught. Arithmetic work develops the idea of size and is used as related to kitchen and shopwork. She writes, "The curriculum of the special school must provide work which requires the physical strength of an eighth grade child, but only the mind of a baby".

Descriptive material is beginning to appear on several of the state and city projects recently established. In a U. S. Office of Education publication, Hill (30) gives a brief account of programs in New York City, Houston, Salem, Cincinnati and Detroit. Descriptions of the daily program schedules for Salem and Detroit are relatively complete. Hill's material is not reviewed extensively here since it is readily available.

The Ohio Legislature passed a bill in January, 1952, providing for the training of severely retarded youth who have been ineligible for schooling under special class regulations in the past. Classes are being established in schools and various social centers. The Akron Public Schools have established classes very recently and have made available a Curriculum Guide. Together with Hill's recent Bulletin, this Curriculum Guide (13) constitutes one of the most comprehensive and helpful sources of aid for those who are meeting the problem of schooling for the severely retarded. The Ohio plan is unique among recently established programs in that major responsibility is assigned to the State Commissioner of Mental Hygiene and to County Welfare Boards. In other states Departments of Education have usually assumed the responsibility.

Legislation authorizing special school classes for the severely retarded was passed in California in 1951. Minimum requirements for admission to the classes include: the child must have adequate sight and hearing, must be ambulatory, must be trained in toilet habits, must be able to communicate sufficiently to make his wants known and understand simple directions, must not be physically dangerous to himself or others, and must be emotionally stable enough so that he can profit from the group experience. Classes were first established in January, 1952, with centers being organized in eight communities during the year. About 250 children were served in the first year, with 12 pupils to a class. The tendency has been to place the children in separate buildings with separate playgrounds. The minimum estimated cost, including such things as transportation, material, teachers salary, and matron salary is $600.00 a year per child for a class of twelve.[1]

Boston has had classes for children with IQ's below fifty for three or four years. They were started at the request of a group of mothers. As of a recent date there were eight classes in operation with 10 pupils in each. Parents provide the transportation. The school day runs from 9:30 to 11:30 so that the parents may be at home when their normal children leave in the morning and return at noon. These hours also protect the retarded children from meeting other children. Two days a week the children remain until 2:15 for speech training. The IQ range is from 30 to 50. A great deal of kindergarten material is used and most of the instruction is on the levels of sensory and social training. Many of these children, after three years of training, are reported as able to read signs, tell time, write their own names and addresses, and conduct themselvee on the streets and busses in a normal fashion.[2]

A limited amount of information is available on programs established in 'Occupation Centres' in New Zealand.[3] The Centres have been established for children with IQ's below 50, but who "have attained a reasonable level of personal hygiene." Each centre is established and administered by an education board. In addition, there are two committees in each locality. One committee, composed largely of parents of retarded children, takes responsibility for keeping the physical facilities of the centre in good order. The other committee, composed of professional people, is responsible for control of admissions and withdrawal policies. Children are admitted between the ages of 5 and 14 and may remain on the roll of the centres until 18 years of age.

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[1] *Personal communication, E. M. Bower, Consultant in Mental Hygiene and Education of the Mentally Retarded, State of California.*

[2] *"Meeting a Present Day Challenge", talk by Dr. Helen F. Cummings, Director of Special Classes, Boston Public Schools.*

[3] *Courtesy of Marie Irwin, Graduate Student from New Zealand, recently at the University of Minnesota.*

Purposes of the centres are specified as follows: "To develop the children mentally, physically, and socially, within the limitations imposed by their handicaps, so that both at the centre and in their own homes they may lead a happy and interesting life. The curriculum should, therefore, include such activities as habit training, sense training, physical training, speech training, handwork, music and movement, story-telling, gardening, training in simple domestic tasks, table manners, etc., provision for periods of free play and of rest and relaxation. For the less handicapped children in the group there can be some training, within the limits of their comprehension, on simple word recognition, counting and making change. With this end in view, to help the children to form good habits, to acquire self-control, and to develop a social sense as they learn to work and play with others. To relieve the strain caused by the presence of an untrained intellectually handicapped child in the family, and to help the parents of handicapped children by demonstrating methods of training and care" (11).

The centres are maintained only for severely retarded children, i.e., no pupils of higher ability are enrolled within the same building. Youngsters attend the schools for the same hours as observed for regular primary grades. However, special provision is made for extra rest periods. The maximum number of pupils in each centre is 40. Staff is provided at the ratio of one staff member to ten pupils, but because of the heavy supervisory load, no centre may have less than two staff members. The minimum number of pupils per centre is 16. The staffing schedule need not conform to a rigid pattern. For example, in a centre with 40 children, there may be two trained teachers and two uncertified assistants (one of whom may be a man), or three trained teachers and one uncertificated assistant.

In the matter of staff qualifications, the Wellington regulations read as follows: "The degree of success achieved will depend primarily on the attitudes of the teachers rather than on their academic qualifications. As many of these children are at about the pre-school mental level, it is desirable that the head teacher and all members of the staff should indicate ability and be temperamentally suited to look after handicapped children. They should possess well-balanced personalities, tact, resourcefulness and imagination, and at least one member of the staff should possess some aptitude for handwork and be able to play simple tunes on the piano. The particular staffing pattern adopted will depend to some extent on the nature of the centre (i.e., whether there is scope for gardening or other extensive outdoor activities or whether there are facilities for the preparation of a midday meal)" (11).

Localities for Occupation Centres are to be on main roads, or not too far removed from homes of the children likely to attend. Transportation is provided by the board of education. Financial assistance is available for the initial "setting up" of centres as well as for annual maintenance and operations. Certain adjustments in the program as outlined above are permitted in small communities.

Summary

The work of Itard in France during the 19th century provides a beginning point in the recorded history of attempts to educate severely retarded children. The early interest of French educators in this problem is further shown in the work of Seguin, Binet and Descoeudres. American research and interest has centered very largely on problems of the higher grade defective. Only recently have institutions and public schools evinced an active interest in improving and extending services to the severely retarded child.

Such limited research as is available on education for the severely retarded is fragmentary and, as is evident from the material presented in this chapter, has sometimes been conflicting in outcome. For lack of dependable research, there is much dependance on opinions for counsel in meeting this problem, varied as the available opinions may be. This carries the obvious

implication that the current movement to extend educational services to severely retarded children does not grow out of anything essentially new in the way of educational methods. Rather, it is very largely a case of service demands preceding research. This situation calls for much caution on the part of those who would stress immediate and large-scale extensions of service at the possible sacrifice of research efforts. There are some recent signs of research interest in the problem, but there is nothing approximating the kind of concerted professional research effort which is needed. So long as there is such paucity of research, just so long will severely retarded children and their families be poorly understood and poorly served.

CHAPTER III

CLASSES IN ST. PAUL AND MINNEAPOLIS

The present chapter describes four public school classes for severely retarded children (Group II classes) now operating in St. Paul and Minneapolis. Three of the classes are located in the Crowley School in St. Paul. One class, organized in January, 1952, is located in the McKinley School in Minneapolis. Each of the classes is directed by a single teacher except for one class of young boys and girls at the Crowley School. Here, an orderly is assigned to assist the teacher. All data included in this chapter were collected in the spring of 1952.

Crowley School also houses classes for Group I students (those with IQ's between 50 and 80). The two types of classes share the use of some of the facilities of the school, playground, lunchroom, auditorium, lavatories, gymnasium, while others, home economics room, shop, are available only to the Group I students. Group I and Group II children never use the same facilities at the same time, however. Teachers and parents of Group II children would prefer that there be a fuller association among all children of the school, but apparently there is preference on the part of some parents and teachers of Group I children that the segregation be maintained.

Group II children come to the Crowley School from all areas of St. Paul. Three youngsters are able to use public transportation, but others are transported by busses. The bus drivers supply the only supervision while the children are on the busses.

Classrooms for the Group II classes are located on the first floor of the building. For such activities as group games and rhythms, the rooms are found to be too small, but for most activities they seem adequate in size. Teachers feel that they need more space in the homerooms and additional special rooms, such as for homemaking and shop activities, and for recreation. The school playground is used by both types of classes, by neighborhood children and by youngsters from a nearby parochial school. Swings and a sandbox are provided.

The lunchroom is also located on the first floor of the school and is easily accessible to the Group II pupils. The children eat sitting at long tables, usually with their teachers. A group of particularly poor eaters is placed at a special table. Lavatories and the gymnasium are located in the basement and the school auditorium is on the third floor of the building. The children seem able to climb the stairs well enough, but the process is time-consuming and tiring for some. When the class as a group goes to the lavatories, the teacher usually accompanies them. However, when only one student goes, he is usually allowed to go alone. Facilities for washing are provided for the young boys and girls in a washroom adjoining their classroom. These young retarded children are encouraged to wash independently, but occasionally one of the more skilled pupils or the orderly will assist the less adept pupils.

The class located at McKinley School in Minneapolis is in an elementary school building which serves normal children except for this one Group II class. The children are transported by taxi and the plan seems to have worked out satisfactorily to date. The same driver makes the run each day and the children know and seem to like him. The classroom is of typical elementary school size. Children bring their lunches to school and eat at their desks.

The playground at McKinley adjoins the school. Group II pupils recess from their classes at the same time as the normal children of about the same age. The teacher had taken steps to explain the new class to the normal children of the school before the special class was organized. As a result, it is observed that there is relatively good adjustment among the retarded and normal children. The normal children go out of their way to speak to the special class members in a friendly manner. If a ball is dropped on the playground, it is returned to its owner. Big boys from regular classes wrestle playfully with little mongoloids and seem not to get angry at the unexpected push by a special class pupil. The teacher reports that this treatment is quite different from that experienced by Group II pupils in their own neighborhoods.

Admissions Policies

Standards for admission at Crowley School might be summarized as follows: (1) a child should be able to toilet himself, and know when he needs to go; (2) he should be able to handle his clothing if he is not crippled; (3) he should be able to feed himself, chew his food properly and be able to handle a spoon and fork; (4) he should be able to understand directions, but need not necessarily be able to talk if he can communicate his needs; (5) he should be able to get around under his own power; (6) intellectually, he should represent a status lower than acceptable for Group I class assignment. These criteria were arrived at long before State standards were drawn up. They differ only slightly from State standards however, as, in fact, they served as a practical basis for drawing up State standards.

Once admitted to the Crowley Group II classes, a child is allowed to remain for a period of time even though no progress is shown. This trial period is allowed to give the child ample opportunity to adjust to the new situation. If, after a trial period, the child still seems not to be making progress, he is discharged as not being ready to profit from the school experience. Occasionally a child may reach a prolonged plateau, or he may be under medication. In such situations the child is removed from the school until he is no longer under medication or until he may be expected to again profit from the school experience. Admissions to the McKinley class in Minneapolis have been in accordance with State Standards (see Appendix A).

The Population

The information concerning the population of these four classes was collected from the school records, except for medical diagnoses in which case parent statements were sometimes accepted. However, parent statements were used only when there was good reason to believe that the diagnosis had been made by a competent professional person.

Table 1 provides descriptive information on children in the classes in terms of chronological age, intelligence quotients, time in the classes, and attendance records. All data represent status in June, 1952.

Table I

Basic Descriptive Information on the Four
Classes Studied, Summarized in Terms of Means and Range

		McKinley YBG*	Crowley YBG*	Crowley OB*	Crowley OG*
		N=8	N=16	N=17	N=15
Chronological	Mean	8-11	10-11	15-9	16-1
Age	Range	7-6 to 10-5	8-1 to 15-9	12-5 to 20-9	12-0 to 20-7
Latest	Mean	45	37	40	39
IQ	Range	37 to 51	17 to 48	25 to 48	25 to 49
Time in	Mean	0-6	3-0	5-1	5-9
Class	Range	-	0-5 to 8-8	0-3 to 10-3	0-7 to 10-0
Days Absent	Mean	16	17	8	12
Per Year	Range	4-34	4 to 34	2 to 18	0 to 54

*YBG - Younger Boys and Girls
OB - Older Boys
OG - Older Girls

The class of younger boys and girls at McKinley consists of eight pupils, four boys and four girls. They range in age from 7-6 (seven years-six months) to 10-5, with a mean age of 8-11. The average IQ of these children (Stanford-Binet) is 45, with a range from 37 to 51. All of these children have been in the class since it was organized in January, 1952, i.e., for about six months. Only two of them had any school experience before enrolling in the Group II class. Medical (etiological) diagnosis was obtainable on only one child, classified as mongoloid. Mere inspection, by non-medically trained persons, indicates, however, that five of the eight children are probably of mongolian type. Using the attendance data for a six-months period to extrapolate for a full school year, the average number of days absent per child is 16.

The class for younger boys and girls at the Crowley School consists of sixteen pupils, nine boys and seven girls. They range in age from 8-1 to 15-9, with a mean age of 10-11. Using the latest IQ reported for each child, the mean for the class is 37, with a range from 17 to 48. These same children entered Crowley Group II classes at a time when their mean chronological age was 7-11. Thus the mean time in the classes is three years. At the time these children were first admitted to the Group II classes their mean IQ was 41, with a range from 26 to 53. Not all of the children have been tested twice or more, but there is indication of a general tendency for IQ's to become lower with age. Eight of the children in this Crowley class had school experience prior to enrollment in the Group II class, one for a period of over three years. Medical diagnoses were available on only eight of the children. Two are mongoloid, two birth-injured, one post-encephalitic and three are afflicted with cerebral palsy. The average number of days absent per school year for these children is 17, with a range from 4 to 34.

The class of older boys at Crowley School consists of 17 pupils. They range in age from 12-5 to 20-9, with a mean age of 15-9. Using latest IQ test results available on each child, the average IQ is 40, with a range from 25 to 48. These boys were admitted to Crowley School at a time when their mean chronological age was 10-8. Thus they have been enrolled in the school for an average of five years and one month. The mean intelligence quotient of this group, using the first IQ reported for each individual, was 44. Again there is indication of lowered average IQ during the time of school attendance. Only six of these boys had any school experience prior to enrollment at Crowley. Three are diagnosed as mongolian, one as epileptic, one as spastic, one as a cretin, and one as post-encephalitic. The average number of days absent per school year for these boys is 8, with a range from 2 to 18.

The class of older girls at Crowley School consists of 15 pupils ranging in age from 12-0 to 20-7, with a mean age of 16-1. Using latest IQ test results available on each child, the average IQ is 39, with a range from 25 to 49. These girls were admitted to Crowley School at a mean chronological age of 10-4, so that the average time of enrollment in Group II classes is five years-nine months. Using the first IQ reported on each girl in school records, the average IQ was 46. Thus, again there is evidence of lowered IQ with age. Ten of these girls had attended regular classes or other types of special classes before being admitted to the Group II classes. One girl had been in other classes for as long as seven years-six months. Medical diagnoses are available on only two of the youngsters, both mongoloid. The average number of days absent per school year for these girls is 12, with a range from 0 to 54.

Objectives for the Group II Classes

The establishment of special classes for severely retarded children immediately raises the question of objectives to be held for the pupils and the program. If there are differences in views among those concerned with the classes, there is difficulty in meeting on common ground to serve the youngsters. Unfortunately there are varied results reported for various classes, as noted in the preceding chapter, and there is probably much misleading guidance as to what might be expected of the classes. The present section consists of statements of objectives as specified by three different groups: (1) the present State Standards as developed by a combined lay-professional committee and adopted by the Minnesota State Board of Education; (2) teachers of Group II classes;

(3) parents of children in Group II classes. It is intended that some basis for clarification of objectives will be provided through the simultaneous presentation of these views along with such other opinion and research information as is contained in the entire report.

The State Standards[1]

As specified in State Standards for Group II classes, the objectives are:

"a. Improvement in habits of self-care.

b. The development of social behavior which will be as acceptable as possible to other people in terms of conformity.

c. To develop self-reliance in areas of constructive activities and good habits of using time.

d. To assist the child in making a satisfactory emotional adjustment in terms of increased control.

e. Cooperativeness in terms of developing comprehension to its limits and good acceptance of authority."

The Teachers

The teachers of Group II classes say the kinds of things noted below when questioned as to what they consider the main job of the special classes. This information was collected in informal individual interviews. In total, the views of four teachers and one supervisor are represented in the following material:

> "The main job of the special classes is one of socialization. They should be taught to get along with others of their kind and with other children in general to help them adjust to their neighborhoods. Teaching play skills is important to the development of motor coordination so that they won't be complete social outcasts. I don't think that much can be done for these children in the line of academics but perhaps one or two of the brighter ones might be able to take a menial job some day, if it didn't require too much intelligence.
>
> "The special class should make the child socially acceptable, enable him to be in the home with the rest of the family and get along. The child should learn to do things with his hands and to occupy his time. He must learn how to listen, look and do. It is important that he learn specific tasks such as mowing lawns, shoveling snow, etc., so that he might contribute to his livelihood later on in life. They must learn to share and to complete a job which they have started within specified time limits. While they are in my room I expect to teach them the alphabet and some word recognition, how to write their first names, how to count to twenty, that red means stop and that they must stop and look both ways before crossing a street, how to hold a pencil or crayon and use them and how to use a scissors for cutting simple objects out of paper. With respect to music the children learn to distinguish various rhythms and do appropriate motions to them. They learn some short (usually not more than two lines) seasonal songs of simple melody. A normal child wants to read when he is about six or seven. These children don't until they mature chronologically, although when they begin it gives them great

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[1] *See Appendix A*

satisfaction. The children in their neighborhoods accept them so much better when they go to school. It is impossible to say how much their deficiency will handicap them when they become adults since it varies so much with each individual child. The majority will always need supervision. Three or four that I know of earn some money but they will never become self-supporting.

"The duty of education is primarily to socialize the child. We can have ideals but cannot carry them through without the materials to work with. Our goals could be much greater if we had the materials to work with, at least some of them. We cannot reach the limits of the children's capabilities under the present circumstances. These children should have more of the practical type training. Academics are fine since they give a little enjoyment, but more important are practical types of learning. The children in my class have been helped much toward social adjustment as well as learning fundamental things for their own protection and health. I think that about twenty-five per cent can learn to read for enjoyment and to fill out blanks with name, address, etc. Some of my students will be able to care for themselves to a certain degree. With supervision they can do some things to earn a living, but I do not think that any of them will ever become absolutely independent. These children should be taught simple homemaking tasks such as sewing on buttons, darning socks, etc., as well as some simple productive work like gardening, grounds keeping, custodial activities, etc. The retarded child has a right to some kind of education even though he may not be able to learn to read; he should be allowed to develop to the extent of his ability.

"The duty of the special class is to train the whole child. They should teach the children to feed and clothe themselves, to be neat, mannerly, courteous, useful and to earn a living if possible. The most important single subject is reading. Some of the children are able to get community news out of the papers, read children's magazines, titles of movies, TV and radio programmings, etc. Many are able to write what they read. Certain of the children earn money working, can go to mail letters, etc. They are able to learn as much as any other child about safety rules and regulations and how to take care of themselves. It is important that these children be taught specific work skills such as ironing, sewing, cleaning, and cooking, but reading remains the most important single skill to be taught. A good deal more could be done along these lines if there were remedial help available so that the children could get individual attention, or if the classes were smaller so that more time could be devoted to each child. The special class makes the severely retarded child a more useful citizen in all ways and means of life, changes him from helplessness to helpfulness. These children so far as they know are not handicapped; it is what others think that makes them so. They will never be able to get along without outside assistance, but some are able to move into the Group I classes, and more would probably be able to if I were able to devote more time to them, and from there they might make a satisfactory occupational adjustment.

"The object of the special class is to help the retarded child achieve. He may develop in growth in the school program, though this growth need not be in academic skills. If he can learn to read, permit him. The severely retarded child should be able to read for protection and information. That is, he should be able to interpret signs, labels, etc.

> The main part of the program is the social development of the children. Group interaction is important so it is best that the groups are not too small since there are so many absences that in a group of eight there may be only two or three present. Every child who can profit from a school program should have an opportunity. The parents in the main want academics. A program shouldn't be worked out and then the children fitted into it. Different groups are present in the school in different years. Some groups can profit from an academic type curriculum while for others this type of program would not be feasible."

To summarize, the teachers seem to be in general agreement that the primary objective of the special classes should be one of socialization. They feel that each child should be taught skills which will enable him to utilize his limited capacities to the fullest, and to adjust to and participate in family and neighborhood groups. They are agreed that the majority of the severely retarded children will never become self-sufficient, but they do feel that a few might become employable on an unskilled level. They believe that most of them can learn simple tasks, such as dusting, sweeping, and washing dishes, which will make them happier and more useful in family life. There is considerable difference of opinion among teachers as to the emphasis which should be given to academic learnings.

The Parents

Finally, it is important that consideration be given to what parents of the severely retarded child regard as suitable objectives for the special classes.

The data on parental objectives, and all other information on parent attitudes and experiences contained in this study were collected through individual interviews with the parents in their homes. More detailed results of these parent interviews are reported in Chapter V. The interviews followed a pre-determined outline, but phraseology of questions was varied to suit the situation. In every instance possible, both parents were present during the interviews, and the opinions of both were recorded. In most cases a clerk accompanied the interviewer so that parents' comments could be recorded as nearly verbatim as possible without destroying the continuity and informality of the interview. Parents were in all cases contacted prior to the interview and appointments were made for a time which would be convenient for them. Cooperation was excellent in all but three cases. In one of these instances there was initial resentment, but ultimate full cooperation. In the other two cases the parents seemed to have little understanding of the special class program and expressed resentment towards the classes and the interviewer. Of the fifty-six sets of parents, it was possible to locate and interview forty-nine for inclusion in this study. Interviews ranged in length from thirty minutes to seven hours, but most of them were completed in about one hour.

To determine the types of training which the parents thought most important for their children in special classes, questions such as: "What is the main thing you want Johnny to get out of his experiences at school?", were used. When more than one type of training was cited, parents were asked which they deemed most important. Occasionally there were differences in opinion as expressed by a mother and father. In such instances both responses were used.

Table 2 summarizes the responses of the parents as classified into six general categories. The largest single category of responses concerns academic training. Thirty-four per cent of the responses specify academic type training as most important. When the data is analyzed in terms of classes there is a tendency for stress on academics to diminish as the mean time of children's attendance in class increases.

Twenty-six per cent of the parent responses suggest that the school should, in the main, teach skills which will make the children more self-reliant or more able to get along in the family and neighborhood groups. Twenty per cent of the responses indicate only that the instruction should be individualized - whether it be academic, vocational, social or recreational. Seven per cent of the responses mention speech as the most important single thing to teach. The remainer of the parents give responses categorized as "miscellaneous" or "can't answer".

The large proportion of parents favoring an academic program takes on a qualified meaning when their actual responses are examined. Of the parents favoring "academics", most state that they do not expect much from this type of a program as far as actual achievement is concerned, but think that it would be valuable if each child were taught at least to write his name, to read a little, and to do simple counting. Only a few parents expect their children to learn any advanced reading, writing or arithmetic.

As a measure of ultimate expectancy for their children the parents were asked in another section of the interview whether or not they thought their child would ever become completely self-supporting. Their responses ('yes', 'no' or 'qualified') were tabulated according to the class in which each child was enrolled, and are presented in Table 3. The data shows a tendency for a lowering of expectations as the child remains in school. In the McKinley School where the mean time in attendance is six months, 63% of the parents (5 out of 8 sets) expect that their children will eventually become self-supporting, 25% give qualified answers, and 12% indicate that they expect the child to remain completely dependent. In the Crowley School class of older girls, where the average child has been enrolled in a special class for a period of five years and nine months, the percentage of parents expecting their children to eventually become self-supporting has dropped to 17%, and 58% of the parents state that they do not expect their child to ever become able to care for himself completely.

Table 2

Parents Conception of the Objectives
of the Special Class which their Child is Attending

Objectives	McKinley	Crowley				
	YBG N=8	YBG N=15	OB N=14	OG N=12	Totals	Per Cent
I Academics: reading, writing, counting, arithmetic	5	7	5	4	21	34
II Self-reliance, socialization, adjustment, support	2	7	3	4	16	26
III According to the child's ability, not otherwise specified	5	4	3	1	12	20
IV Speech	0	2	1	1	4	7
V Miscellaneous: What he is getting. Anything but coloring, etc.	0	2	2	1	5	8
VI Can't answer: No idea, don't know what they should teach	0	0	1	2	3	5
Totals*	12	22	15	13	61	100%

**The totals do not correspond with NS since in some cases more than one main objective was cited by the parents.*

Table 3

Parental Answers to the Question
"Do you ever expect your Child to become Self-supporting?"
Distributed according to the Class in which the Child is
Now Enrolled.

	Yes	Qualified	No	N
McKinley	5	2	1	8
Crowley, younger boys and girls.	6	4	5	15
Crowley, older boys.	5	3	6	14
Crowley, older girls	2	3	7	12
Totals	18	12	19	49

The Classroom Programs

To give some insight into classroom activities, each of the four classes was observed on a minute-to-minute basis for several days.

A rather typical day for the young boys and girls at McKinley could be summarized as follows:

9:00-9:05	Removal of wraps and settling down
9:05-9:15	Teacher reviewing with children the activities of previous day
9:15-9:25	Pre-academic--attempts at telling the story of activities, recognizing flash cards bearing students' names, etc.
9:25-9:35	Color matching and counting
9:35-10:00	Word matching and pasting
10:00-10:10	Recite poem and listen to records
10:10-10:25	Music and rhythm
10:25-10:30	Toileting
10:30-10:50	Playground (free activity)
10:50-10:55	Rest
10:55-11:25	Picture puzzles
11:25-11:30	Toileting
11:30-12:00	Lunch
12:00-12:30	Rest
12:30- 1:25	Playground or gymnasium
Similar activities in the afternoon	
2:05	Children leave for taxicab

A typical day for a child in the younger boys and girls class at Crowley School is summarized below:

9:00-9:10	Removing wraps and settling down
9:10-9:20	Passing out of puzzles and roll call
9:20-9:30	Working on puzzle
9:30-9:35	Morning milk
9:35-10:05	Drawing, coloring, etc.
10:05-10:25	Current discussion, habit discussion and teacher tells story with a moral
10:25-10:35	Flash cards with numbers and letters and safety lessons

10:30-10:45	Toileting
10:45-10:50	Free play
10:50-11:15	Music, singing and rhythm
11:15-11:30	Playing musical games
11:30-11:40	Drawing geometric figures
11:40-12:15	Teacher reads or tells stories
12:15-12:30	Toileting and miscellaneous activities
12:30- 1:00	Lunch
1:00- 1:10	Toileting
1:10- 1:30	Play
Afternoon, similar activities	
2:02	Children leave for busses

A typical day in the class for older boys at Crowley School summarizes as follows:

9:00- 9:10	Removal of wraps and settling down
9:10- 9:20	Passing out and collecting for milk
9:20- 9:40	Individual study projects--child working on letter chart, for example
9:40- 9:50	Picture cards, counting coins, small group arithmetic work
9:50	Pledge of Allegiance
9:50-10:10	Records, music, singing
10:10-10:50	Coloring of "dittoed" bluebird-like model
10:50-11:00	Reading of primer--and discussion
11:00-11:10	Second reading group
11:10-11:30	Coloring and finishing activities
11:30-12:00	Playground
12:00-12:30	Toileting and rest
12:30- 1:00	Lunch
More of similar activities or modified crafts in afternoon	
2:02	Children leave for busses

The older girls at Crowley School engage in the following kinds of activities in a typical day:

9:00- 9:07	Removing wraps and settling down
9:07- 9:10	Allegiance to flag, collecting milk and lunch money
9:10- 9:20	Milk service
9:20- 9:45	Group 1 reading
9:45-10:00	Watch TV--An Educational Program
10:00-10:25	Group 2 reading, Group 1 arithmetic
10:25-11:00	Arithmetic
11:00-11:15	Project slides of "Little Red Hen" and students attempt to read captions
11:15-11:30	Playground
11:30-11:40	Toileting
11:40-12:10	Drawing and other art work
12:10-12:20	Puzzle
12:20-12:30	Finishing up and free play
12:30- 1:00	Lunch
1:00- 2:00	Handicraft and handwork
2:05	Children leave for busses

In order to get a break-down on the types of activities, each class was visited for several days and then time-sample data were combined to give a picture of a typical day. An attempt was made to break the activities into the following categories:

(1) Academic (or pre-academic): Reading, writing, arithmetic or exercises designed for letter and number recognition, counting, etc.

(2) Nonacademic: Stories, art, handicraft, music, rhythm, conversation, etc.

(3) Recreation: Actual recess from school or free-play in classroom where children determine activities

(4) Housekeeping: Functions necessary to operation of class, rest, toileting, milk and lunch periods, getting out and putting away supplies

Table 4 summarizes results of this four-way categorization of school activities. It may be noted that a great deal of time is given to "nonacademic" activities in all classes. This category includes telling stories, art, handicraft, music, rhythm and unstructured conversation. Much time is also given to routine "housekeeping" functions, but the amount of time so spent tends to reduce for the older children. There is increasing time given to academic and pre-academic activities in the classes for older children.

Table 4

Percentage of Time Given to Four
Kinds of School Activities in Four Group II Classes

Activity	McK YBG	Crowley YBG	Crowley OB	Crowley OG
Academic or Pre-academic	5	15	17	25
Nonacademic	40	40	38	38
Recreational	13	14	10	9
Housekeeping	42	31	35	28
	100%	100%	100%	100%

A further breakdown on the four kinds of activities listed in Table 4 was attempted. The time sample data were analyzed for each category to show the amount of time in which the children were able to work together and the amount of time spent in individual work. It was observed generally that the young children were most frequently taught on a "unison" or group basis.

For nonacademic activities the young children were taught in full class groups 75% of the time. Older children required smaller groups for their nonacademic work. Only 50% of their nonacademic school time was spent in full class instruction. A similar trend was noted for academic and pre-academic instruction. Most activities for young children were of "unison" type, but for older children 90% of the academic instruction was done on a highly individualized basis.

The trend was reversed for recreational activities. In free play periods, particularly, older children organized on a group basis much more consistently than did the younger children.

Of further importance and interest was determination of the extent to which individual pupils participated in the school activities. Eighteen representative pupils, six each from the three Crowley School classes, were observed repeatedly through a school day. Pupils in each class were observed in turn for twenty-second intervals and for each observation a rating as to "degree of participation" was made. These ratings were on a scale of three values as follows:

(1) participating fully in the activity

(2) paying attention, but not participating fully

(3) not paying attention

Results of these ratings are plotted against IQ and presented in Graph 1. It may be noted that as the IQ increases there is a consistent increase in the degree of participation in school activities. Children with IQ's above 40 were rated as "participating fully" about 75% of the time. Those with IQ's below 20 were observed to participate in the special class program only 29% of the time. It appears that the program as offered at Crowley School has interest for only those with IQ's above 30.

Achievements of Group II Pupils in Crowley School

The present section reports certain data on the achievements of children in two of the classes at Crowley School. Included also are observations of parents concerning the improvements they had noted in their children consequent to special class attendance. Parent observations were obtained in the case of 49 children distributed through all four classes described in this chapter.

A series of tests was administered to 31 pupils (16 boys and 15 girls) in the two classes for older boys and girls at Crowley School. The testing has been limited very largely to academic skills. It should be understood that such testing taps only very limited aspects of the children's development. Achievements in nonacademic areas are generally judged more important for severely retarded children. Nevertheless, many parents are interested in the teaching of academic subjects and a considerable portion of the school time is given to such training. Evaluation of this part of the school program thus seems appropriate.

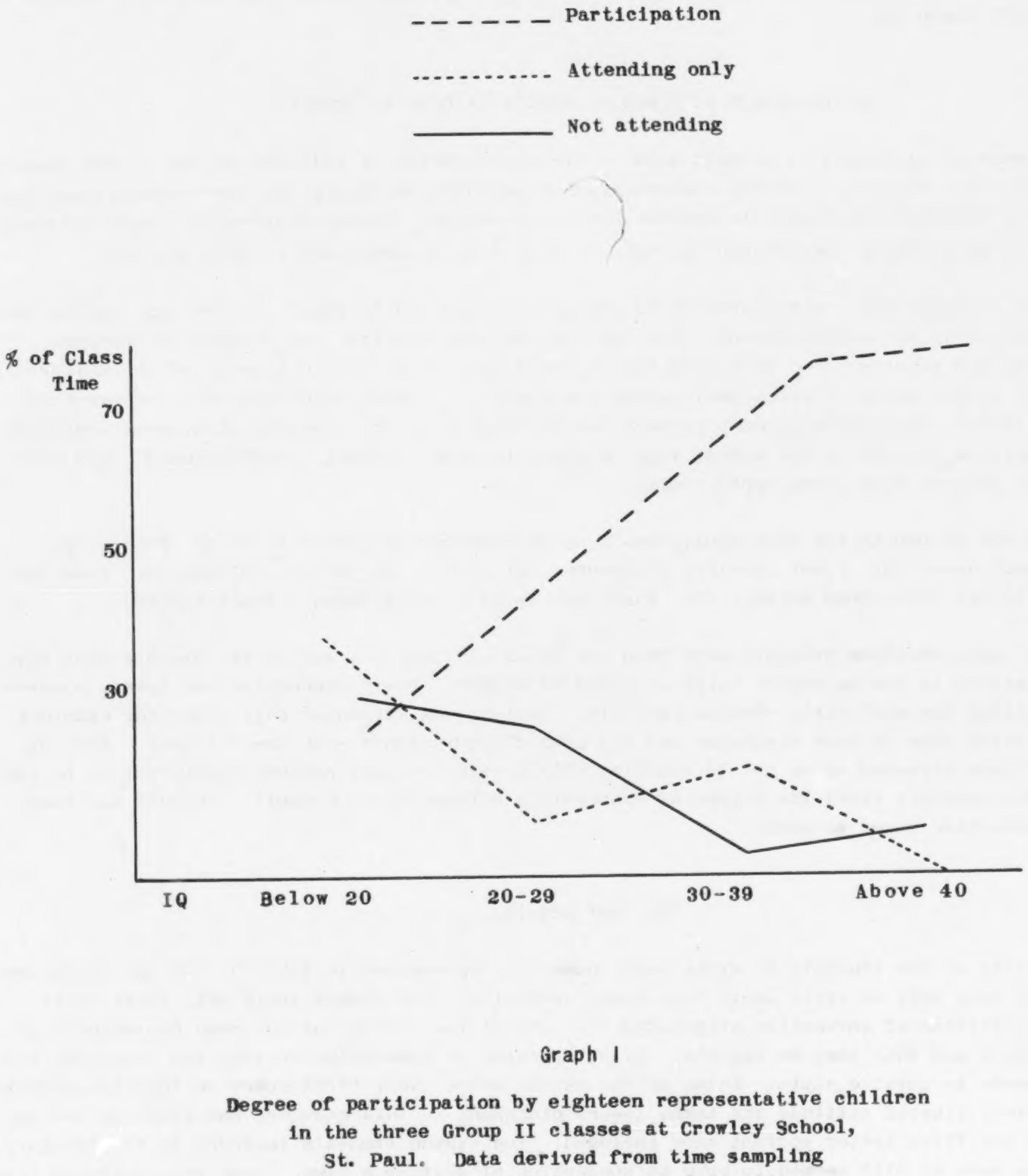
Each of the 31 pupils was seen individually by an examiner and asked to do the following: (1) write your name; (2) count (orally) to twenty; (3) write the numbers to ten; (4) read the following material (described below); (5) what time is it? (being shown a wrist watch).

Testing these children presents more than the usual difficulties and it is possible that the information gained is not as highly valid as could be wished. Every precaution was taken, however, to assure getting the most valid results possible. Testing was attempted only after the examiner had spent several days in each classroom and had gained acquaintance with the children. Testing was done at times arranged so as not to conflict with recess or other periods highly valued by the children. The examiner rated the degree of cooperation offered by each pupil. In only one case was such cooperation rated as poor.

The Test Results

The ability of the students to write their names is represented in Table 5. Of the thirty-one pupils, three were able to write their full names correctly. Ten others wrote only their first names. The criterion of correction stipulated that all of the letters of the name be included in correct sequence and that they be legible. Either cursive or manuscript writing was accepted, but only three wrote in cursive style. Seven of the pupils wrote their first names in "partly correct" fashion. A very liberal attitude was taken toward placement in this category and students who had as little as the first letter correct were included. The eleven students included in the category "cannot write name at all" seemed to have no conception of writing a name. Some were confused with the distinction between letters and numbers and included both in their responses. Others made marks on their papers resembling letters or groups of letters; others simply scribbled on their papers. It should be recalled that the boys reported on here had been in school for an average period of five years and one month, and that the girls had been in the school for an average of five years and nine months.

Ability of the students to count is represented in Table 6. Three boys and six girls counted to twenty perfectly. Six students, three girls and three boys, failed to produce any numbers in sequence. Others gave evidence of some ability in counting but failed at some point in the sequence to twenty. Twenty-two counted to five or more and seventeen counted to ten or more. Among those who failed completely in counting, some held up various numbers of fingers, others repeated numbers but in improper sequence, and others vocalized unintelligibly.



Graph I

Degree of participation by eighteen representative children in the three Group II classes at Crowley School, St. Paul. Data derived from time sampling observations of twenty-second duration.

Table 5

Ability of Students to Write their Own Names
Thirty-one Pupils in Crowley School Group II Classes

Level of Performance	No. of Boys	No. of Girls	Total
Full name correct	**1**	**2**	**3**
First name correct	**5**	**5**	**10**
First name partly correct	**4**	**3**	**7**
Cannot write at all	**6**	**5**	**11**

Table 6

Ability of Students to Count Orally to Twenty
Thirty-one Pupils in Crowley School Group II Classes

Level of Performance	No. of Boys	No. of Girls	Total
All 20 correct	**3**	**6**	**9**
Correct to 15, but not to 20	**1**	**1**	**2**
Correct to 10, but not to 15	**4**	**2**	**6**
Correct to 5, but not to 10	**4**	**1**	**5**
Correct to 2, but not to 5	**1**	**2**	**3**
None correct in sequence	**3**	**3**	**6**

Ability of the pupils to write the numbers consecutively to ten is represented in Table 7. Four of the boys and six of the girls were able to write the full series correctly. Seven other pupils were able to write some of the numbers correctly (at least two in proper sequence), but fourteen failed completely in this task. Among those who failed completely, some wrote numbers, but in improper sequence; others combined letters and numbers; still others made random marks on their papers.

Table 7

Ability of Students to Write Numbers to Ten
Thirty-one Pupils in Crowley School Group II Classes

Level of Performance	No. of Boys	No. of Girls	Total
Correct to 10	**4**	**6**	**10**
Some correct (at least two in proper sequence)	**4**	**3**	**7**
None correct	**8**	**6**	**14**

Reading was tested by presenting material from a basal reader series at three different levels: (1) a first preprimer; (2) a second preprimer; (3) a first grade reader. The selections were taken from a basal series being used in the classrooms. The material was typewritten with a primer typewriter on regular sized paper. Each child was asked to read orally at the lowest level. If the reading was satisfactory, the next higher level of materials was then presented, etc. Reading was judged satisfactory if a child correctly read at least seven out of eight words in the total running words of each selection.

Results of the reading tests are presented in Table 8. None of the boys was able to meet the criterion of success at any level. Four of them were able to recognize some words correctly, however. Only four girls failed completely on the test. One of the girls read satisfactorily in the first-grade material, three others reached the level of the second preprimer and two reached the first preprimer level as their highest attainment. The remaining five girls showed some limited word recognition ability.

Table 8

Reading Abilities of Thirty-one Students
in Group II Classes of the Crowley School

Level of Performance	No. of Boys	No. of Girls	Totals
First-grade Reader	0	1	1
Second Preprimer	0	3	3
First Preprimer	0	2	2
Some word Recognition Ability	4	5	9
No Words Correct at Simplest Level	12	4	16

When asked what time it was, none of the children was able to give the time exactly, but four of the boys and two of the girls were able to give the time correctly within a quarter hour. Most other members of the classes made attempts to give the time, but were apt to be several hours off. A few of the children simply pointed to the hands on the watch or gave other indications of lack in time concepts.

As a further informal type of testing, the pupils were asked to tell the total amounts of money represented in various combinations of coins. No more than four coins were used in any combination. Only pennies, nickels and dimes were used, with never more than one dime in any single combination. Two of the boys and two of the girls were able to give correct responses consistently. Eighteen other students responded correctly on at least the simplest combination, two pennies. Others failed on all combinations, some persisting in telling how many coins there were and others "naming" the coins.

Parental Observations on Achievements

Parents of children in all four of the classes were asked for observations of achievements. In total, parents of 49 children were interviewed. Questions were framed something as follows: "What changes have you noticed in Johnny since he began attending the special class?" Table 9 represents a summary of parent responses.

Table 9

Changes Noted in Children as a Consequence of Special Class Attendance According to Parents Statements Arranged in Order of Decreasing Frequency

Area of Achievement Noted	McKinley School	Crowley School			Totals
	YBG N=8	YBG N=15	OB N=14	OG N=12	
Speech improved	3	6	4	3	16
More sociable	3	7	1	4	15
Writing improved	1	5	0	4	10
Self reliant, eating, care of self, etc., sticks up for self	2	3	3	2	10
No noticeable change	0	1	3	5	9
Work habits improved	0	6	1	1	8
Emotional adjustment improved	1	1	4	2	8
Handicrafts improved	0	0	1	6	7
Pre-Acad.; coloring, scissors, etc., improved	1	4	1	1	7
Manners improved	0	2	1	0	3
Reading improved	0	0	0	2	2
Numbers improved	1	1	0	0	2
Coordination improved	0	1	0	0	1
Totals*	12	37	19	30	98

The totals do not correspond with Ns since in some cases more than one main improvement was cited by the parents.

It may be noted that few parents mention academic achievements. The only academic subject mentioned by over ten per cent of the parents interviewed was writing. Reading was mentioned by two parents, both of whom had a child in the class for older girls. Numbers were also mentioned by only two parents. In total there were 14 responses citing academic improvements, whereas there were 75 responses mentioning nonacademic improvements. Parents of nine of the children reported that they had observed no changes in their children.

During the interviews there appeared to be a general tendency toward increasing dissatisfaction with the special class program as the children had been in the program for increasingly longer periods of time. Parents of young children just entering the program seemed to be enthusiastic about the program and the progress they were able to see. For these young children there was frequent mention of improvements in personal and social adjustment, in speech and in work habits. Parents frequently reported that the children had been wanting to attend school and that when this became possible there was immediate happiness and growth in general self-reliance. Parents mention also that family anxieties caused by the need for constant supervision are relieved as the children start their schooling.

Another approach to parental evaluation of the program is found in a recent study by Mrs. Marcella Lorenz (41). As a part of a follow-up study on all pupils who had attended the St. Paul Beta classes during the period 1937-1951, she asked parents in what ways they believed the program had helped their children. This part of the study was limited to parents of forty-one children, out of a group of 84, who were still living at home within Minnesota. The median age of the former pupils at the time of this follow-up study was twenty-two.

Mrs. Lorenz has not classified the responses given by parents as to specific achievements, but an examination of her case notes reveals the following kinds of comments: (1) there was some mention of academic learnings. Such specific comments as the following were made by parents:

> "Learned to write or print name.......learned to read signs and simple material.......learned to repeat poems.......learned names of days of week and colors......."

(2) there is mention of improvements in personal, family and social adjustments, as shown in the following comments:

> "Increased interest in immediate surroundings.....increased personal pride.....gained self-confidence.....overcame many fears.....was more contented and has a happier attitude.....had a better understanding of and adjustment to his community.....was able to entertain and amuse himself for longer periods of time.....learned habits of orderliness...."

(3) there is mention of improved motor abilities, posture and attention to health and safety:

> "Improved posture.....improved motor coordination.....learned to skip.....learned to throw and catch a ball.....learned rules of health and safety....."

Lorenz also asked parents of former Beta class pupils for comments on weaknesses and needs of the special class program. In general, the parents duplicated the items listed as achievements of pupils. Some wanted more attention given to academics, to vocational training, and leisure time activities. They felt that classes had been too large and that there was an insufficient number of classes. There was much comment on the need for improved facilities and for some type of program for those beyond age twenty-one. Thirty-seven of the forty-one sets of parents interviewed felt that the school program should be continued beyond age twenty-one. Need for a sheltered workshop program was also mentioned frequently.

Summary

Children have typically entered the Group II program in Minnesota at about age 9-0, at which time their median mental age is about 3-9. Assuming a slight decline in IQ as the children grow older, as is actually observed in the St. Paul experience, it might be anticipated that the median mental age of these pupils will not exceed 6-0 at maturity. Thus it appears that, as a group, the population served in Group II classes does not, at maturity, exceed the mental ability level usually considered requisite for beginning first-grade school work.

Most children entering the program are able to feed and toilet themselves and are able to negotiate stairs. Behavior and/or conduct problems seem generally not to be a major factor in the classes. Homogeneous grouping by age is found advantageous in the Crowley School. Further grouping by sex is preferred for older pupils. Attendance of pupils is adequate.

Objectives for Group II classes as specified by the State Board of Education, by teachers and parents seem to be much in agreement at a very general level. All objectives emphasize matters of socialization and habits of self-care as of high importance. To the extent that statements of objectives have been specific, however, they have at once tended to be difficult of attainment. It is noted, for example, that many parents and some teachers wish much emphasis to be given to academic learnings. There is every evidence in this study, and in most others, that academic training for severely retarded children is not fruitful.

It is observed that parents tend generally to lessen expectancy for "academic achievements" and "ultimate self-support" as the children have been in the classes for increasing lengths of time. There is a limited indication, however, that these changes in expectancies on the part of parents are accompanied by an increasing dissatisfaction with the special class program. It is difficult, of course, to know whether this apparent dissatisfaction of parents results merely from their fuller realization of the problems faced by their youngsters or from specific disappointments in the school program. In approaching the problem of objectives, teachers and parents have frequently mentioned the need for smaller classes, improved school facilities, and an extended program for those beyond age twenty-one. It was felt by many that with an extended program and more adequate facilities more could be accomplished.

The programs in Group II classes, as they have developed in St. Paul and Minneapolis, for young severely retarded children seem to be essentially of nursery school type and level. Some emphasis is given to pre-academic training but most school time is given to housekeeping, nonacademic and recreational activities. In classes for older boys and girls more time is given to academic training and less to housekeeping activities. Handicraft activities are also given more time and attention.

In all of the Group II classes there is a decidedly higher degree of rigidity and repetitiousness in programming than would be observed in any other type of school class. This was less true of the new class in Minneapolis where the teacher was still experimenting to find appropriate activities for the children. The repetitiousness was especially observed with respect to academic work, but was evident even in the case of storytelling, rhythms, coloring, scissor work, puzzle work, and games. Even the apparently informal conversations between teachers and pupils are found highly repetitious from day-to-day. This is noted in pupil anticipations of questions and various time-related but jumbled word associations. A great deal of repetition is obviously necessary for learning in the case of retarded children, but there is much indication of high specificity (non-transferability) in the learnings which might be apparent in a first visit to Group II classrooms.

Very little in the way of spontaneous organization is observed among the children, although older groups do show definite superiority over younger groups. The children manage to "get on", however, without serious disturbances, even when the teachers are out of the classrooms.

Time-sample studies indicate a substantial and positive relationships between tested intellectual level and degree of participation in Group II programs. That is, children with IQ's of 30 and below were observed to participate very little in the programs. Those of higher IQ tended to enter into the classroom activities more consistently.

In academic achievement areas there is evidence that Group II pupils have universally failed to achieve to levels which would be of vocational or social significance. A few pupils read for recreational purposes in very simple materials. Parents and teachers stress that pupils have made substantial progress in social adjustment, in speech and in work habits as a result of the special class program. There seems little doubt that there are real advantages for the children in these learning areas.

CHAPTER IV

FOLLOW-UP STUDIES OF THE SEVERELY RETARDED

The Lorenz Follow-up Study

As reported in chapter one, classes for severely retarded children have been maintained in St. Paul continuously since 1934. At the end of the 1951 school year, Marcella H. Lorenz, a former teacher in the Crowley School of St. Paul, did a follow-up study on 84 children who had completed their program in the 1937-51 period (41). She sought data on their location, evaluated their post-school adjustments and obtained certain other information as noted below. Of the total of 84 former pupils of these so-called Beta classes, now known as Group II, she found 66 still living in Minnesota. It will be noted that parts of the data refer to the total of eighty-four individuals while other data refer only to the sixty-six still living in Minnesota.

Lorenz gathered her information by questioning parents, neighbors, institution aids, friends, and social workers. She says, "It was with many misgivings, but armed with my address book, questionnaire, and a map of the city, that I started out on this study of former Beta pupils...." Whenever possible she conducted the interviews in the presence of the former pupils in order to make observations of appearance and speech. In all interviews she used a Guide Sheet covering five areas of information: (1) general identifying information; (2) social adjustment; (3) recreational development; (4) personal development; (5) present work status.

For the entire group of pupils the average IQ was about 36. This mean is computed on the basis of the latest IQ available on each child. For two children there were no test records. Various intelligence tests had been used, but they were all of the individual type. The Kuhlmann Individual Tests of Mental Development were used most frequently. For 33 children there were two or more IQ's included on school records. Contrasting earliest IQ's with latest IQ's in the case of these 33 individuals, seven showed gains and the remainder showed lowered IQ's during the period of school attendance.

The pupils had come to the Beta classes with a wide variety of earlier educational experiences. Thirty-six of them had never attended any school. Forty-seven others had histories of some earlier school experience. For one remaining boy, there was no record of earlier educational experience. Of the forty-seven with earlier school experience, twenty-four had been in other types of special classes, seven had been in private schools, one had been tutored privately and fifteen had been in regular classes of either public or parochial schools.

Their periods of attendance in the Beta classes also showed much variation. One child spent only seven days in a Beta class; three others stayed for more than thirteen years. The mean length of time in the Beta classes for the eighty-four pupils is approximately five years. Table 10 gives a more detailed account of the time spent by pupils in the program.

Table 10

Length of Time Enrolled in
Beta Classes

Years	No. of Children
Under 1 year	13
1 - 3 years	26
4 - 6 years	17
7 - 9 years	16
10 - 12 years	9
13 years and over	3

The pupils dropped from the classes for a number of different reasons. All pupils were admitted originally on a trial basis. Presumably all of them were to be able to toilet and feed themselves at the time of admission, but it was discovered that these conditions were not always satisfied. In total, seventeen cases were excluded from school after a trial period for reason of inadequate toilet habits or objectionable behavior. Forty children remained in the classes until they reached the upper age limit, which for a time was 16 years but was later revised to 21 years. Transportation difficulties led one child to drop out, three transferred to other schools, and one moved out of the school district; for the remainder, information is incomplete.

Table 11 shows the disposition of cases in the period immediately following their Beta class experience.

Table 11

Status of Children Immediately Following
Beta Class Experience

Disposition	Male	Female	Total
Institutionalized	20	12	32
Private School or Tutor	4	0	4
Stayed at Home	14	24	38
No information	6	4	10
TOTALS	44	40	84

It can be seen that about half (47%) of the children were institutionalized (public or private) immediately upon leaving the Beta classes. Of this group, boys are more frequently institutionalized than girls (63% vs. 33%). These percentages are computed on the 74 cases on whom information was available.

As another part of her study, Lorenz reports the disposition of all cases as of August, 1951. The median age of the cases at that time was twenty-two. Table 12 reports this information with a breakdown according to medical diagnosis. At this more recent date there were a few less cases institutionalized and a few more at home. Nine were deceased and nine others had moved from the state. The information on medical diagnosis is sketchy and not always specifically concerned with etiology of mental deficiency. This is an indication, however, of the inadequate medical information which was available to teachers of these children.

Causes of death for the nine cases are reported as follows: Asthma - 1, pneumonia - 1, influenza - 1, drowning - 1, sprue - 1, heart ailment (not otherwise diagnosed) - 1, undetermined or no information - 3.

The average IQ for those at home is 38. For those in institutions the average is about 33. For two of the latter cases there were no IQ records available. These IQ's are again reported on the basis of the latest test record available on each child.

Table 13 reports the August, 1951, disposition of all cases, with a breakdown by sex. The tendency for a greater proportion of boys (48%) than girls (30%) to be institutionalized persists.

On the 66 cases (33 male and 33 female) still living and in Minnesota, Lorenz presents further descriptive information. Using the Minnesota Home Status Index to rate the socio-economic status of each of the sixty-six families it was observed that children who remained at home tended to be

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from families of the higher socio-economic strata. None of the homes of children remaining at home were rated as below average, twelve were rated average and the remaining twenty-nine as above average. For homes of institutionalized children, none were rated as above average, thirteen as average and twelve as below average.

Table 12

Medical Diagnosis and Present (August, 1951) Location of 84 Former Beta Class Pupils

	PRESENT LOCATION				
Diagnosis	At Home	Institutionalized	Deceased	In Private Boarding School	Moved Out of State
No information	23	8	5	2	7
Mongolian	5	7	1	1	0
Cerebral Palsy	3	2	1	0	0
Heart Involvement, St. Vitus Dance	1	0	0	0	0
Progressive Muscular Dystrophy	0	0	1	0	0
Cretin	3	2	0	0	0
Paralysis (right side)	0	1	0	0	0
Epileptic	2	0	0	0	1
Cerebral Lesion	1	0	0	0	0
Manic-Depressive	0	1	0	0	0
Microcephalic	0	2	0	0	0
Cerebral Hemmorrhage	0	0	1	0	0
TOTALS	40*	23	9	3*	9

** The disposition of one case is unclear. Further sections of the report will usually list 41 as at home and only two as in private boarding schools.*

Table 13

August, 1951 Location of 84 Former Beta Class Pupils by Sex

Disposition	Male	Female	Total
Deceased	5	4	9
Moved from State	6	3	9
At home	17	23	40
Colony for Epileptics	1	0	1
State School and Colony	14	8	22
Private Boarding Schools	1	2	3
TOTALS	44	40	84

Social and Intellectual Development

About two-thirds of the cases at home are reported as well-accepted by the community. Twenty-four were so rated, whereas ten are described as retiring and as having very little contact with the general public. Seven others are reported as able to go about the community on public conveyances without immediate supervision. Parents of three of the poorly accepted cases reported that they would take the individual out into the community more often "if people would cease staring."

The religious affiliations of cases at home are as follows: Catholic - 24, Protestant - 14, Hebrew - 1, No affiliation - 2. Twenty-one of these attend church regularly, six of them being able to go alone. Others attend church irregularly or not at all.

Speech ratings are available on thirty-six of those at home. The ratings were done by Mrs. Lorenz, using the following categorizations:

1. Good speech - able to use the telephone and carry on a conversation using sentences.
2. Average or understandable speech - can make needs known, but used only single words or short phrases.
3. Poor speech - makes only noises or refuses to talk.

Of the thirty-six cases, seventeen (five males and twelve females) were rated as good, twelve (seven males and five females) as understandable or average, and seven (four males and three females) as poor.

Of the 25 institutionalized cases as of August, 1951, fourteen (nine males and five females) had records of anti-social or objectionable behavior. No comparable information is provided on cases at home. Such items as the following are included in the case notes under the heading of "anti-social conduct" on institutionalized cases:

> "....Disturbed neighbors with screaming....setting fires....objectionable sex activities with children....sex problem....abusive to mother....abusive in school....destructive and abusive....ran away....set fires....exposure.... molesting children....set fires....neighborhood complaints....sex problem.... excited over boys...."

Church affiliations of those institutionalized were as follows: Catholics - 12, Protestant - 8, Hebrew - 3, No Preference - 1. Church attendance figuree are not available on those in institutions.

With respect to social adjustment in the institutional setting fourteen were rated as friendly and well adjusted, three as passive, five as isolates, and two as aggressive and quarrelsome. In adjustment to institutional routine, the former Beta pupils are rated highly as compared to the general patient population.

Thirteen of the twenty-five institutionalized cases were reported as poor in speech, twelve as average and four as good. As compared to those at home, those in institutions rated generally poorer in speech.

Recreational Interests and Activities

In the way of recreational activities, cases at home are reported to enjoy movies, victrolas, television and looking at magazines. These same activities, especially movies and television, are reported as first choices of institutionalized cases, although facilities do not always allow them.

The following comments of Lorenz give a picture of the more active recreational interests of those at home:

"....two females actually reading books, two females playing musical instruments, one male riding a bicycle, two (one male and one female) playing with toys, three males going fishing, one male going to a playground craft class, one male creating original designs with marbles, one female sorting and arranging her jewelry, three (two males and one female) going to see and talk to people, three females embroidering towels, aprons, and bibs, three (one male and two females) cutting or coloring pictures, one female working puzzles and two females writing and printing words. Twenty-one cases enjoyed musical programs and two girls had real talent, being able to reproduce any melody they heard although neither has had any formal training. Radio serial stories were followed by eighteen, five males and thirteen females, but one girl and one boy enjoyed the news commentators while one boy and one girl preferred baseball and football broadcasts. Since only five of the forty-one had learned to tell time, it was interesting to note that many used the radio to tell time. By learning the sequence of the regular programs many of them knew the exact hour of the day and when the different programs were due.......Thirty-four cases enjoyed the movies, with four, two males and two females, able to attend neighborhood theatres alone. Regularity of attendance has lessened since twenty-five now have television. Cowboy, western, and theatre programs were preferred, but one enjoyed seeing if she could spell the words given on a spelling contest program and two liked cooking and recipe programs, with one listening only to the commercial advertisements and going around his home to find the various articles mentioned. Twenty write or print their names and copy words from books, one girl copies the names of her favorite television programs, one lists the pieces she can play on the piano, three copy words and numbers from old school books, and three can write simple letters to their friends. One girl was attempting to use a typewriter, but was not successful without careful supervision. Only five girls have continued embroidery work or loom weaving, but this could be due to lack of materials and insufficient interest from the homes. Since poor motor coordination is common among the intellectually inadequate, it was not surprising to find little or no active participation in sports, although one case rode a bicycle well enough to go five miles a day, and several boys attempted to play group ball games in the neighborhood when tolerated by the gang. Games requiring only simple judgment or interpretation were popular. Five were taken to play bingo quite often, and eight attempted to play solitaire. Two actually followed rules and the others had originated a system of their own which was repeated so consistently it resembled a game. Jigsaw puzzles were enjoyed by many....."

Personal Habits, Health and Accidents

"With regard to habits of self-care, Lorenz reports that thirty-one of those at home "needed no help in dressing. Ten needed assistance with buttons and shoe laces. Eighteen had some help in personal care, the girls with their hair and the boys with shaving. Thirty-three individuals used both a knife and fork and had good table manners. Eight, two of whom were still under eleven years of age, were using only a spoon or fork. Four, three females and one male, were often taken to public restaurants for meals and two males were able to get their own lunch or supper. Thirty-three cases were allowed to select what clothes they wanted each morning, and twenty-five were taken to the stores to buy new clothing when necessary. Since some of the cases are very obese, some of the parents stated that it was very difficult to get clothes to fit. In three cases all the clothing had to be made. Many of the girls had beauty kits and were very particular of their nails, spending much time applying nail polish. Very few wore any make-up except powder....

"In the institutions the cases had no chance to select their own clothing, but eight had very definite likes and dislikes and were particular about their appearance.

Twelve used only spoons in eating but spoons were the only utensils used in some of the cottages. One case had to be fed. Twelve used both knife and fork and were listed as being very particular and having good table manners. All the males were regularly shaved by institution barbers. Fifteen cases were able to dress themselves, but nineteen needed help."

Sixteen (24%) of the sixty-six cases living in Minnesota have suffered some type of respiratory illness, such as pneumonia or bronchitis. Two have been hospitalized for tuberculosis. Thirteen of the cases (nine males and four females) have been involved in rather serious accidents, requiring medical attention. In going through the detailed case data provided by Lorenz a total of fourteen accidents (for the thirteen individuals) are listed. They are described and distributed among the cases at home and in institutions as follows:

For cases at Home

Accident - Lighted cigarette put in his pocket
Struck by car (two cases)
Broke arm in fall from swing
Fell down stairs (two cases)
Sled hit by car
Fell from cab
Hurt on bicycle
Cut forehead on broken bottle
Caught hand in wringer
Dart put out left eye

For Those Institutionalized

Struck by car
Cut finger on knife

Most accidents have occurred at home. This finding may be partially accounted for by the fact that lesser information was available on institutionalized cases. In any case, it is clear that a large number of these youngsters do meet with serious accidents, many of which could have been prevented by closer supervision and better appreciation of the implications of the child's poor judgment.

Work Status

Forty-five of the sixty-six former Beta pupils still living in Minnesota are reported as performing some kind of useful work either at home or in an institution. Females at home were found "washing dishes, peeling fruits and vegetables, hanging up washing, sweeping and scrubbing floors, dusting furniture, cleaning bathrooms, making beds and ironing flat pieces." Most parents rated the work as well done but slowly done by the girls. Males at home were found "shoveling walks, mowing lawns and emptying garbage and paper." Work at home by males was rated as acceptable and "needs supervision" more often than as good. Of the twenty-five in institutions, eleven were found performing some type of useful job. They were washing dishes, polishing furniture and floors, making beds and waiting on some of the helpless cases. Three of those in institutions were reported as needing very little supervision.

Lorenz lists ten individuals (all males) as having histories of some employment in their home communities. As of August, 1951, however, the number employed in either part-time or full-time work was four. Five others had worked for brief periods, but had given it up for various reasons. One other male had been institutionalized. Of the four employed at the time of the study, two were working on a part-time basis. One does yard work under a friend's supervision and the other does occasional golf caddying (without keeping the score) and stock lifting in a store.

Two other males were working full-time. Data on these individuals are given below:

Case 3:

Works full-time washing pots and pans in a department store. Works 40 hours a week. Employer is a stranger. Diagnosis: Heart involvement with St. Vitus Dance. IQ's reported: 62, 55, 48, 44 and 46. Age as of August, 1951: 19-0. Attended Beta classes two and one-half years at ages 9 through 11. Was in parochial school one year, private school for two years and in an institution for one year after leaving Beta classes. Comes from an above average home. Rides streetcar alone to and from work.

Case 40:

Works full-time as a janitor. Supervisor is friend. Was recommended for the job by former tutor. Also works Saturdays (janitorial work) in a second establishment. Diagnosis: Cerebral lesion. Only one IQ is reported: 55, as determined by Stanford-Binet, form L. Attended Beta classes for one month at age eleven. Age as of August, 1951; 20-9. Prior to enrollment in Beta classes he had been in parochial school one year and State School and Colony for two years. After leaving Beta classes was in parochial school for two years and had private tutoring for five years. Home is rated as average.

Both of these males had IQ's higher than 50 at the first testing and the reason for their admission to the program is unclear.

The Channing Follow-up Study

A very extensive follow-up study of pupils from the special classes of Newark, Rochester, Detroit, Cincinnati, Los Angeles, San Francisco and Oakland, was published by Alice Channing in 1932 (10). She excluded from the study all those who had been institutionalized so that relatively few severely retarded children were included. It is likely also that the poorly-adjusted defectives were eliminated in this process. Of a total of 1,067 pupils located, 69 had never been employed. Of these 69, 35% had IQ's below 50. For the remainder of the group, all having some history of employment, 7% had IQ's below 50. The author writes: "Although the number of individuals, both boys and girls, with intelligence quotients of less than 50 is too small to form any definite conclusions as to whether the continuity of their employment was related to their inferior intelligence, it should be noted that a relatively larger number of them than of those with greater intellectual capacity had been unemployed at least half the time and that on the other hand a relatively smaller number had been unemployed only 20 percent of the time or less."

Twenty individuals whose intelligence quotients were under 50 had stayed in one position for two years or more. Two individuals with intelligence quotients of about 20 were found working. One of them had been employed for practically all of the five years, after he had left school, and the other for three out of six years. Another boy with only a slightly higher IQ had worked for only six months out of five and a half years. A girl with an intelligence quotient of 38 had been employed for only three weeks and a boy with an intelligence quotient of 37 had been employed for only seven or eight weeks in a five-year period.

Most of the employed boys having IQ's below 50 were working as laborers, or in industry. Most of the girls were doing factory work or were in domestic service. The wages of the group were less than for higher IQ groups and less than half of the average wage of the general working population.

In related study of former residents of State School in Illinois, Channing found that of 25 severely retarded individuals who had been out of the institution over a year, 18 had been employed and 7 had not. The amount of unemployment was unrelated to IQ. Here also there is a selective factor operating in the population studied, in that only the best-adjusted individuals would have been discharged from the institution.

Channing's summary of her studies is as follows: "It would appear that personality difficulties were closely associated with failure to work steadily. As far as could be judged from the small number of individuals in the present study, all of whom were morons or imbeciles of the higher grade, differences in the intelligence level as measured by the intelligence quotient, as among individuals from special classes, had very little relation to steadiness or success at work" (10). It should be noted that in making this statement she is comparing groups, all of whom are in varying degrees mentally deficient, and she is saying nothing about their employment record as compared with that of normals.

The Jewell Follow-up Study

Jewell's study was concerned with 190 children who had been excluded from the schools of the District of Columbia because of low mentality (34). The majority of the individuals fell within the 30 to 50 IQ range. At the time of her study the disposition of the 190 cases was as follows[1]:

32 were committed to the District Training School
21 were certified for commitment
10 had died
2 were wards of the boards of public welfare
2 were committed to other institutions
68 were not located
80 were still in the community

Most of the study is concerned with the adjustment of the 80 individuals, ages 7 through 25, who were still in the community. Table 14 has been prepared to summarize the data presented by Jewell on adjustments of these 80 cases in the home and community.

Table 14

Home and Community Adjustments
of 80 persons Excluded from School for Reason
of Mental Deficiency

Quality of Adjustment	Females N=34	Males N=46	Totals N=80
Good Home Adjustment	28	35	63
Poor Home Adjustment	4	5	9
Not at Home	2	6	8
Good Community Adjustment	22	24	46
Poor Community Adjustment	6	6	12
Never Leaves Home Alone	4	10	14

As may be seen in Table 14, Jewell rates most of the individuals still in the community as well adjusted in the home and community. Of the girls, 11 were found helping around the house, 2 were employed outside the home and 2 participated in community activities. Of the boys, 5 helped around the house, 3 were employed outside the home and 2 helped their fathers. Thus, of 122 severely retarded persons located, 5 were gainfully employed outside their own homes. It is to be noted, however, that some of these individuals were not of employable age at the time of the study, and that none of them had had the advantages of school training.

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[1] *Some children fall into more than one category. Therefore the total in the breakdown below is greater than 190. This overlap problem appears also in the case of Table 14.*

Jewell was able to locate parents of 78 of the children for purposes of an interview study. The attitudes of these parents toward training and treatment for their children were as follows:

24 said they needed help in giving their children better training
21 expressed need for some kind of custodial care either now or later
40 expressed a desire for day classes
44 were not favorable to putting their child in the District Training School

Miss Jewell concludes her study as follows: "The majority of the 122 children who were located were, generally speaking, well adjusted in the home and the community. As a group they were not and had not been a very great problem to the community....Employment was found in very few instances, but such employment had been successful when pursued" (34, p. 240). She believes that in most cases the parents could well be permitted to continue caring for their severely retarded children at home and suggests four aids to help them: a field worker to help with child training and family adjustment, a visiting teacher, custodial day school centers, and more institutions.

Other Studies of the Severely Retarded as Workers

Town and Hill (57) in a study of those discharged from Rome State School between 1905 and 1924 found that those patients who had become partly or totally self-supporting had a median mental age of about 8 years, while those who were not self-supporting or had been recommitted to the institution had a median mental age of six or seven. Not enough data is presented to make these figures very meaningful beyond the generalization that apparently some of those with mental ages below 8 were self-supporting and that a larger proportion of those of higher ability were self-supporting.

In an experiment to study the employment of subnormal girls in factory work, Biglow (6) reports that the severely retarded could satisfactorily pick paper from parts of rubber shoes and place the material in piles of twenty-four, or four piles of six each, but could do nothing demanding finer discrimination or more accuracy than this.

In a study of the work records of mental defectives in Pennsylvania, the following figures are reported (17):

IQ	N	Percent ever Employed	Percent Holding Position Over One Month
Below 40	19	5	0
40 - 50	61	51	12

The types of work reported for those with IQ's between 40 and 50 included housework, factory work and dishwashing.

Barr and Unger (60) in a study of the employed girls in New York State found the following jobs suitable for the various mental levels. Girls with a mental age of five could do packing. Various types of light factory work were found possible for a girl of approximately six years mentality. With a seven year mental level they could do assembly work, examining, pasting labels, and be errand girls. The authors caution, however, that it would be a grave mistake to assume that all girls at the specified mental ages could fill these jobs satisfactorily; rather, the mental age mentioned for each task is a minimum.

In a follow-up study of 104 children excluded from the Omaha schools (56) because of low intelligence, 80 per cent were located. This group included some with IQ's above 50 and some below 50. Of those located, 17 per cent were employed full or part time. The median IQ of those employed part time was 50 and of those full time 53.

Abel and Kinder (1) have found that girls with mental ages as low as five and six can learn to do very successful handloom weaving and pillow lace but it takes a long time to teach them. It takes a severely retarded girl several weeks to learn what a normal girl could learn in a few hours. In spite of the fact that these girls can eventually be taught the mechanics of a simple job, the authors feel that, "those with IQ's below 50 are so low in intelligence as to be unable to achieve social adjustment except under the very limited custodial conditions" (1, p. 8).

Goddard's Vineland Industrial Classification (25) is one of the best known generalized descriptions of the occupational tasks which can be successfully performed by mentally retarded people. The portion of the classification which refers to the severely retarded is reproduced below:

Mental Age	Type of Work
3	No work; plays a little
4	Tries to help
5	Only simplest tasks
6	Tasks of short duration; washing dishes
7	Little errands in the house; dusts

Goddard also adds that although some of those with mental ages of six and seven are trained in shop work and manual training in school, when they leave school they are not found in the shops but only on farms and in the house doing the simplest work.

Tredgold, out of his vast experience with the mentally defective, has drawn these conclusions: "The capacities of the adult (severely retarded) will of course be very considerably influenced by the nature and amount of training he has received as a child...As a result of training a considerable proportion can be employed in such simple duties as sweeping and scrubbing floors, polishing brasses, weeding garden paths, collecting potatoes, helping in the laundry and so on" (58).

Gesell thinks that the severely retarded can be trained as helpers in routine work in colonies and institutions (22). Doll indicates that they can be trained for very simple occupational tasks, under supervision. Penrose sees this optimistic note: "A striking feature of defectives....is their apparent incapacity for being bored with an occupation....In a regular, even if monotonous employment, they learn to be useful and worthy people" (49).

Murchison (45) presents the following table from Vanuxem Education of Feeble-minded Women which shows tasks that can be performed at various mental ability levels and the length of time necessary for them to learn each. The time element is of particular interest since many employers would not have the patience to repeatedly demonstrate these simple processes.

Mental Age	Time to Learn	Task
1 - 2	1 day	Picking stones, trash from lawns, walks
2 - 3	3 days	Weeding one kind of weed
	8 days	Scrubbing
	16 days	Errands
3 - 4	3 days	Picking one kind of fruit, vegetable
	8 days	Sawing wood
4 - 5	7 days	Simple hand washing
5 - 6	19 trials	Darning
	12 trials	Milking
6 - 7	31 days	Fine hand ironing
	15 trials	Baking bread

Summary

There are no comprehensive follow-up studies of the severely retarded which extend through the full span of life. Available research of longitudinal nature carries through only to the early adult years, as in the studies of Lorenz (41), Channing (10), and Jewell (34). A limited number of studies of cross-sectional design are reported on the work records and possibilities of the severely retarded adult, but they have often lacked meaning because selective factors operating to establish the populations studied are usually not specifiable.

The study by Lorenz is of particular interest since all members of her population had attended special classes of Group II type for some period of time. Lorenz found that at a median age of twenty-two, about half of the living boys and one-third of the living girls were institutionalized. This finding is quite consistent with those of the Jewell study (34), although in the latter instance the children studied had not attended public schools. The Lorenz study shows a number of factors associated with institutional placement: (1) sex - more boys than girls are institutionalized; (2) socio-economic status - children from families of average and below average status are most frequently institutionalized; (3) broken homes; (4) behavior problems; (5) poor speech. IQ seems only moderately related to disposition in the post-school years. Etiology also seems but little related to adult placement. It is noted, for example, that of twelve living mongoloids reported on by Lorenz five are at home and seven are institutionalized; of five cretins, three remain at home and only two are institutionalized.

Most severely retarded children who remain at home are rated as well-adjusted in the home and community. This is shown in both the Lorenz and Jewell studies. Anti-social conduct has been the immediate cause for institutionalization of some, however. The recreational activities of those who remain at home are preponderantly passive and individual in nature. Only a few of them are found able to move about their communities independently. In the follow-up studies there is consistent evidence that severely retarded individuals do not develop academic skills to any significant level even if they have had the advantage of school training. A few of them do continue in school-type reading, copying and number activities at a simple level as a recreational activity.

Most of those who remain at home are found performing some useful tasks in the home. Of those institutionalized, a lesser proportion seems able to work in a useful way. Only a very small number of severely retarded persons are found employed outside their homes or institutions. In the Lorenz study, for example, only two males of a living population of sixty-six were found employed full-time and in the case of both these individuals the initial IQ recorded on school records was above 50. Of eighty severely retarded individuals in the community, Jewell found two females and three males employed outside their own homes. It is noteworthy that the Channing and Lorenz studies were done at times when the employment climate was very favorable. It is also of concern that there are probably fewer jobs available today, which are suitable to performance by individuals of low ability, than a generation or two ago.

Among those who do find employment it is observed that various non-intellectual factors are important to success. Appearance, personality, drive, persistence, and such other traits seem to be important determinants of employability for the severely retarded, just as they are for persons of higher ability levels. Such jobs as are obtained by the severely retarded are of very simple and routine nature. To succeed in work even at this level the severely retarded person requires patient training and sympathetic supervision. This is true whether the individual be at home, in an institution or elsewhere.

CHAPTER V

AN INTERVIEW STUDY OF PARENTS

Much of the impetus for public school classes for the severely retarded child has come from parent groups and it appears appropriate that information about these parents, about what they want for their children, and about their experiences in training their children be considered. Certainly no study of retarded children is complete except as the attitudes, understandings, problems and concerns of parents are investigated and understood.

With this view in mind, James Kiland undertook an interview study of parents having severely retarded children in the St. Paul and Minneapolis Group II classes (37). His study provides a valuable adjunct to the data provided in the preceding two chapters. The manner in which the interviews were conducted is described briefly in Chapter 3.

A copy of the general guide sheet used in the parent interviews is included as Appendix B to this report. The items listed in the guide sheet and the tables and discussion to follow in this chapter have been arranged to coincide in ordering as a convenience for the conscientious reader. Table headings will usually include specific item references to the interview guide sheet.

Population

The group studied was drawn from a population pool of 56 sets of parents who had a child in one of the four Group II classes for severely retarded children in the Twin Cities. The original intention was to make a census of the entire group, but because of illness in the family, absence of addresses and telephone numbers in the school records, etc., it was possible to locate and interview parents of only 49 (87.5 per cent) of the children. A breakdown according to class (see chapter 3 for a detailed description of these classes) in which the child was enrolled shows the following percentages contacted for each: McKinley, 100% (hereafter abbreviated MCK); Crowley younger boys and girls, 94% (hereafter abbreviated YBG); Crowley older boys, 82% (hereafter abbreviated OB); Crowley older girls, 80% (hereafter abbreviated OG).

Education of Parents

The education of parents is presented in Table 15. It will be noted that the mothers have had, in general, more education than the fathers although beyond high school training the education of the fathers is equal or superior to that of the mothers. Of the total group, 24 persons or 26% have had a high school education or more. The remainder have less than a high school education. In view of the age of the parents, the distribution does not seem to deviate markedly from that which would be expected in the general population.

Occupational Status of the Wage Earner

The occupational status of the wage earners is indicated in Table 16, categorized according to Barr's extension of the Taussig Scale as revised by Fryer. A comparison of this data with that given in Paterson and Rundquist's "The Occupational Background of Feeble-Mindedness" (48) indicates that while the occupational status of this group is superior to that of the parents of those persons admitted to or applying for admission to one of the state institutions for the mentally defective, it is inferior to that of a random sample of wage earners in Minneapolis. This finding can perhaps be accounted for in this manner. The wage earners in the Paterson and Rundquist study have children who are distributed throughout the entire range of the mental deficiency continuum. In all probability their population thus included a higher proportion of familial defectives than does the present study.[1] On the other hand, the population of the Group II classes does contain some familial defectives which would account for the occupational status of the parents studied being inferior to that of a random sample in the city of Minneapolis.

Table 15

Frequency Distribution Indicating the Education of the Parents Tabulated in the Order of Increasing Academic Achievement

*N=91

Highest Grade Attained	Father	Mother
Grades 1-6	7	10
Grades 7-11	27	20
Vocational	1	2
H. S. Graduate	2	9
College 1-3	5	5
College Graduate	2	1
	44	N=47

**N does not equal 98 since information could not be secured on seven cases. Three of the mothers and three of the fathers in the group are deceased. Two of the families are broken by divorce and one of the cases is a foster home.*

Table 16

Frequency Distribution Indicating the Occupation of the Wage-earner Tabulated in the Order of Decreasing Occupational Status

*N=47

Occupational Status of the Wage-earner	F
High Professional and Major Executive	1
Low Professional and Business	2
Technical, Clerical, and Minor Executive	5
Skilled Trades and Lower Clerical	23
Semi-Skilled Trades	9
Unskilled Laborer	7
	N=47

**N does not equal 49 since information could not be secured for two of the cases.*

---

[1] *This is an entirely tentative generalization for several reasons. The Paterson and Rundquist data are not of recent date (1933) and there is the impression that in recent commitments parents are generally of higher competency than in the past. There is also the common observation that parents of severely retarded children are, as a group, clearly above the general group of parents of retarded children in socio-economic and educational level.*

Number of Children

The range and mean number of children per family is presented for the four Group II classes in Table 17. The data indicates a general tendency for the mean number of children per family to increase as does the mean age of children in the classes, probably because that is a function of the length of the reproductive life of the mother. The mean number of children per family for the total group of 3.60, calculated from the raw data, is substantially in excess of that to be expected from a random sample of the general population.

Table 17

Range and Mean Number of Children Broken Down
to Class in which Child is now Enrolled, Reported
in order of Diminishing Means
*N=48

Class	Range	Mean	N
Crowley OG	2 - 10	4.72	11
Crowley OB	1 - 7	3.57	14
Crowley YBG	1 - 11	3.26	15
McKinley	1 - 5	2.75	8
	Total	3.60	N=48

**One case in Crowley OG reported "one every year" and would give no further information. This data was not included in the table.*

Ordinal Position of the Mentally Retarded Child

The ordinal position of the mentally retarded child is presented in Table 18. Approximately half of the children are first-born and 14% are only children.

Table 18

Ordinal Position of Mentally Retarded Child,
Broken Down According to Class in which Child is now Enrolled

Class	Only	First	Last	Middle	N
Crowley OG	0	5	3	4	12
Crowley OB	3	3	3	5	14
Crowley YBG	2	*6	5	2	15
McKinley	2	3	2	1	8
Total	7	17	13	12	49

**One child in this group has a normal twin.*

Twenty-six per cent of the children are last-born, while 24% fall intermediately. The largest single discrete category consists of those children who are first-born but not only children. It can be seen that the majority of parents who have had a severely retarded child do not forgo having other children. However, the 40% of the cases in which the mentally deficient offspring is either the last or only child may indicate need for provision to parents of information on the hereditary bases of mental deficiency.

Mothers Age at Birth of the Mentally Retarded Child

The mothers' responses to the question, "Mrs.____, how old were you when ____ was born?" are reported in Table 19. The modal interval ranges from 25-29 years, approximately what would be expected in a general population sample, but the table as a whole shows a general tendency for more births than would be expected falling beyond the modal interval. The mean age of mothers at birth of children in the various classes is: Crowley YBG, 28 years; Crowley OB, 28 years; Crowley OG, 33 years; McKinley, 33 years. The total mean age of mothers at birth of the mentally retarded child is approximately 30 years, two or three years older than a similar figure reported in census data for mothers in the general population. These findings substantiate those previously reported elsewhere that as the age of the mother increases the chance of giving birth to a defective child also increases. This generalization is particularly applicable in the case of mongolian children and the Group II classes do include a large number of children of this type.

Table 19

Frequency Distribution of Mothers' Responses to Question 1a,
"Mrs.___, how old were you when ___ was born?" Tabulated in
Order of Increasing Age
N=49

Age	f
To 20	1
20-24	12
25-29	14
30-34	10
35-39	4
40-44	7
45-49	1
	N=49

Initial Experiences with the Mentally Retarded Child

The age of the MRC[1] at the time his parents first suspected he was mentally retarded and at the time they became certain he was mentally retarded is presented in Table 20 and Graph 2. It is disturbing to note that over 60% of the parents do not even suspect that their child is retarded before he is one year of age. Seventy-three per cent of the parents are not certain of their child's deficiency before this time. Most parents begin to suspect that their child might be deficient when he is between the age of one and two years, although the modal category for certainty of mental retardation is not until the child enters school. The graphic data probably show most clearly the definite and substantial time lag between the parents' first suspicions and the time they are confirmed. This is not always, because the parents have failed to consult professional help, as will be seen later (Table 24), but rather seems to be because those persons consulted could not, or would not, make or communicate a diagnosis of mental deficiency. In some instances it seems clear that such a diagnosis was made, but that the parents were not able to accept it and did not do so until forced to by the exigencies of such things as school entrance or contacts with other children.

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[1] *MRC - Mentally Retarded Child; MR - Mental Retardation.*

Table 20

Frequency Distribution of Parents' Responses to Question 1b "When did you first suspect that he might be different from other children?" and Question 1e, "How old was_____ when you became sure that he was going to be a little slower in developing?"
N=49

Age	First Suspected MR	Certain of MR
Birth - 1 wk.	10	5
1 wk. - 5 mo.	4	5
6 - 11 mo.	5	3
1 - 2 yrs.	* 13	11
3 - 5 yrs.	9	8
School entrance	6	* 14
After above	2	3
	N=49	N=49

**Indicates modal intervals.*

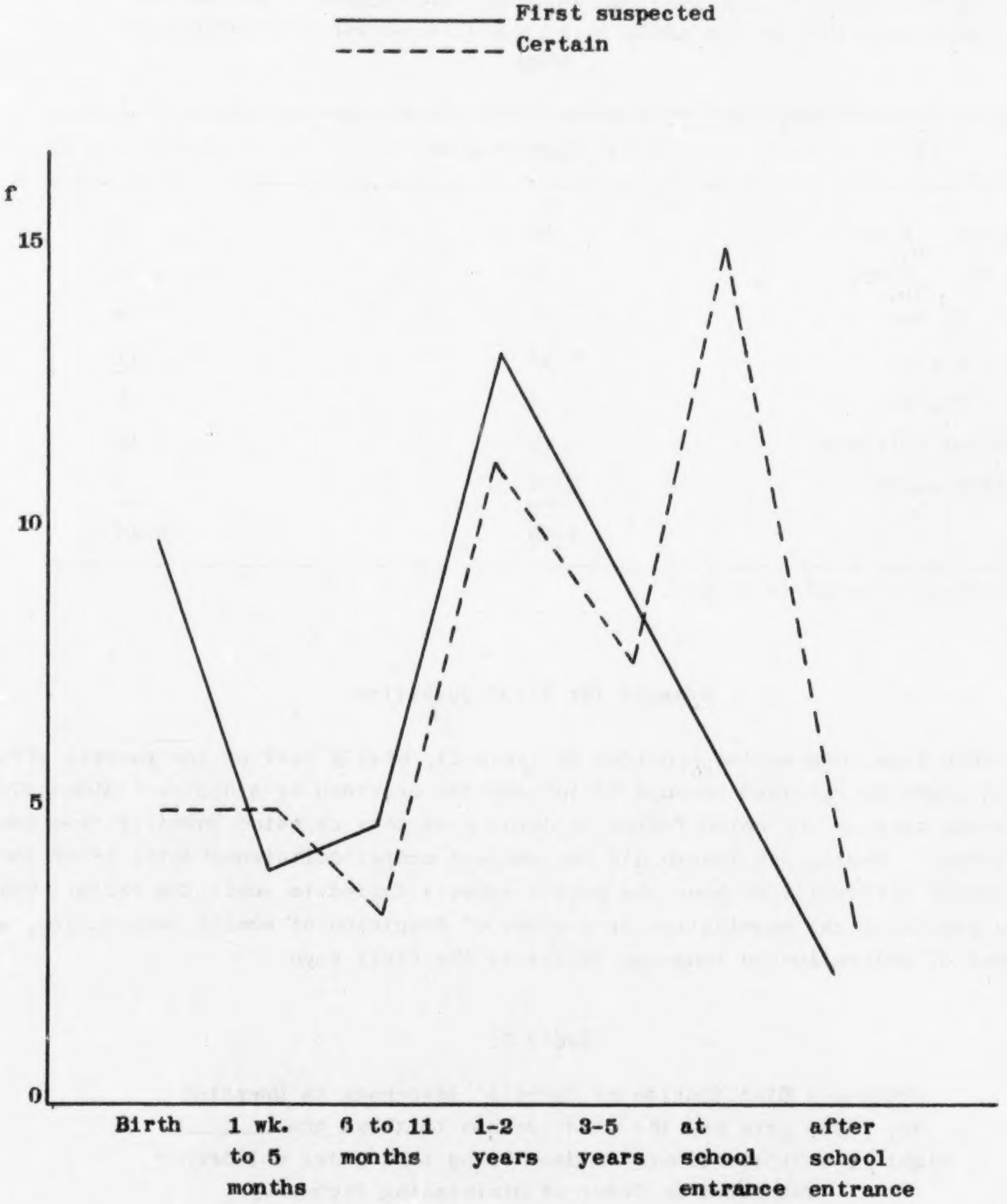
Reasons for First Suspicion

As can be seen from information provided in Table 21, nearly half of the parents first suspected that their child might be retarded because of information provided by a doctor. About 27% suspected something was wrong because the child failed to develop as they expected (usually from comparison with other children). Nearly one-fourth did not suspect mental deficiency until after the child began to have school difficulty or when the public schools failed to admit the child. Only two parents mention psychological examination as a cause of suspicion of mental retardation, while one mentions slowness of maturation in language skills as the first sign.

Table 21

Frequency Distribution of Parents' Responses to Question 1c, "What gave you the first reason to think that______ might be a little slower in developing than other children?" Tabulated in Order of Diminishing Frequency
N=49

How Defect was Discovered Source of Information	f
Told by doctor	21
Failure to develop as expected	13
School difficulty	12
Psychological examination	2
Speech defect or no speech	1
	N=49



Graph 2

Frequency Polygon illustrating child's age at the time parents first suspected mental deficiency and at the time they were certain the child was mentally deficient. (Data of Questions 1b and 1e, Table 20)

Maturation of the Mentally Retarded Child

Table 22 presents data on the MRC's attainment of various maturational indices: bladder control, bowel control, drinking from a cup or glass, walking, talking, and speaking sentences. The data have all been collected on the basis of parent statements and thus suffer in reliability for reason of limitations in memory. In each of the areas the parents report behavior which ranges from precocious through normal to very retarded. In general, a high proportion of these retarded children show retardation in these maturational indices. This is especially evident in the language spheres. The modal interval for speaking in sentences, for example, is six to seven years. Age of walking also shows clear retardation. Other areas would perhaps show a greater retardation except for the likelihood that parents were most concerned about failures in walking and talking and thus were able to report more reliably on these matters. These data will deserve consideration when decisions are to be made as to when mentally retarded children will be accepted for care outside their homes.

Table 22

Frequency Distribution of Age at which Child Attained
Various Maturational Levels
(Data of Question 1d)
N=49

Age	Bladder	Bowel	Drink	Walk	Talk	Sentences
1-6 months	0	1	2	0	0	0
7-12 months	7	7	4	7	3	0
13-18 months	9	*13	8	3	4	0
19-24 months	4	4	*9	12	*16	0
2-3 years	*10	4	7	*13	10	8
4-5 years	7	7	4	11	8	6
6-7 years	1	0	1	1	2	*10
8-10 years	0	0	0	0	1	6
Not as yet	1	4	0	0	0	8
Uncertain	10	9	14	2	5	11
	N = 49	49	49	49	49	49

**Indicated modal age range for attainment of maturational index.*

Reason for Confirmation of Mental Retardation

The manner in which the parent becomes convinced that his child is defective is presented in Table 23. Approximately half of the parents cite medical diagnosis as their confirmation of MR. About 30% state that they became sure their child was retarded as a result of their own observations. Eighteen per cent of the parents did not become convinced that their child was retarded until a school refused to accept him. One case mentions contact with a psychologist as confirming his suspicions of deficiency.

Table 23

Frequency Distribution of Parents' Responses to Question 1f, "What made you sure?" Tabulation in Order of Diminishing Frequency
N=49

Confirmation of Mental Retardation	f
Medical diagnosis	24
Parents' Observation of child	15
Refusal of school to accept	9
Psychologist	1
	N=49

Source of First Assistance

After learning of their child's deficiency the parents set out to secure assistance with their problem. Where they go is illustrated in Table 24.

Table 24

Frequency Distribution of Parents' Responses to Question 2a, "Where did you first turn for help?" Tabulation in Order of Diminishing Frequency
N=49

Where parents went for Help	f
Family doctor	14
Teacher	14
Clinic, Univ. of Minn. Hospital, etc.	7
Psychiatrist	4
Pediatrician	3
Social Worker	3
Nobody	3
Chiropractor	1
	N=49

About 28% first seek the advice of their family doctor. The same proportion look to teachers for their first help. Fourteen per cent utilize clinics and hospitals offering specialized medical services. Fourteen per cent go directly to a medical specialist (8% psychiatrist, 6% pediatrician).

Six per cent contact a social worker or welfare agency and one consults a chiropractor. By far the greatest share of the burden in these first contacts falls upon the medical profession. In all, 55% of parents look to it as their source of first assistance. There are surprisingly large numbers of these parents, however, who turn to teachers as a source of first help.

Sources of Further Assistance

The parents are, in the main, dissatisfied with the assistance received through the first contact and usually go on to other persons and agencies for help. Table 25 presents a frequency distribution of all attempts to secure help with their problems. It should be noted that the previous groups mentioned retain their relative positions, but that a host of new sources of assistance have been added. All categories increase in absolute number. The mean number of contacts reported per family is nearly five, the range being from one to eleven. Implied in the fact of these many contacts by most families is the evident incompleteness of help or interpretation which the parents experience in most single contacts. Most of them perceive their understandings as being reached on something of an "installment plan".

Table 25

Frequency Distribution of Parents' Responses to the Question 2a, "Where did you first turn for help?" and Question 2e, "Who else have you seen about your child?" Tabulated in Order of Diminishing Frequency
N=49

Agency, Profession, Group or Individual Contacted	Number of Persons Claiming Contact
Family Doctor	*** 58**
School Teacher	**42**
Clinic or Hospital	**35**
Medical Specialist	**27**
Welfare, Social Worker, "Court House"	**27**
Crowley or other Special Class	**24**
Chiropractors, Osteopaths, "Healers"	**8**
Board of Education	**6**
Psychologist	**5**
P.T.A. or Assn. of Friends of the Mentally Retarded	**4**
Friends or Relatives	**3**
"Teach Me"	**1**
Total	**240**

M = 4.9+
Range = 1-11

**Indicates modal category*

Kinds of Assistance Received

Table 26 reports the first kind of assistance given to parents in their contacts with professional persons or agencies. Eighteen of the cases were provided with information on how to care for their child and what to expect of him. Thirteen were referred to another agency or individual. Five were told that their child was mentally retarded but were told nothing beyond this to the best of the parents' ability to recall. Five were given medical treatments for their children. Institutionalization was recommended at the time of the first contact in four cases. Counseling, in the sense of working through parent anxieties, was reported in two instances. Two parents state that nothing was done for them. Not reported in the Table, but revealed in the interviews was the fact, as reported by parents, that nearly one-third of them (14) were told in at least one contact that their child was probably not mentally retarded.

Table 26

Frequency Distribution of Parents' Responses to Question 2c, "What did they do?" Tabulated in Order of Diminishing Frequency. N=49

Assistance Received	f
Provision of information	18
Referral to another agency, etc.	13
Medical treatment	5
Received no help	5
Recommendation of institutionalization	4
Counseling	2
No information	2
	N=49

Value of Contacts Made

Parental answers to questions such as "What profession or type of agency has been especially helpful to you in understanding your child?" and "What service did not seem to be much help" are reported in Table 27. About 22% reply that teachers (other than special class teachers), the Board of Education, school psychologists and others in the Board of Education building have been most helpful to them. This has usually involved assistance in getting their child into a Group II class. Twenty per cent say that special class teachers have given them the most help. Eighteen per cent are uncertain as to what service they received was most valuable. Fourteen per cent feel that doctors assisted them the most, but about 35% state that doctors gave the least valuable help. Most of those who have contacted a medical specialist feel well satisfied with the help received. These data need to be interpreted, of course, in relation to the previously reported differences in the number of contacts made with various professions and agencies and the time at which the contacts were made. Yet the data as presented in Table 27 does have an independent significance in suggesting the perceptions that parents do actually have about the kinds of help received.

Table 27

Frequency Distribution of Parents' Responses to the Question 2g, "What person or agency has been most valuable to you in understanding your child?" and Question 2h, "What services did not seem to be of much help?"
N 49

Individual or Agency	Most Valuable	Least Useful
Special Class Teachers	10	3
Uncertain	9	16
Doctors (general)	7	*17
Doctors (specialist)	5	2
Other Teachers, Bd. of Ed., etc.	*11	5
Other Parents of MRC, Par. Groups	2	2
Personal reading	2	0
Psychologist	1	1
Relative	1	0
Welfare Agency or Social Worker	0	3
No one helped	1	1

**Indicates modal categories*

Degree of Satisfaction with Special Classes

Table 28 reports the responses of parents when questioned as to their satisfaction with the special class programs in which their children were enrolled. It can be observed that most parents are satisfied with the classes, but believe some improvements could be made. When asked what specific improvements they would wish, the parents gave the following types of responses in approximate order of decreasing frequency: teach more academics, smaller classes, better physical plant, more speech training, extend services beyond age twenty-one, more emphasis on nonacademic types of training.

Table 28

Frequency Distribution of Parents' Responses to the Question 7d, "How satisfied are you with what the special class has been able to do for___?" Broken Down According to whether or not the Parent had ever visited a Special Class while it was in session and Tabulated in Four Degrees of Satisfaction. N 49

Degree of Satisfaction	Have Visited	Never Visited
Very satisfied	**4**	**2**
Satisfied	**10**	**15**
Partially satisfied	**7**	**7**
Not satisfied	**2**	**2**
	23	**26**

Parent Views on State Guardianship and Institutionalization

Parents were questioned to determine the extent of their knowledge of the Minnesota State Guardianship procedure. Sixteen of the parents seemed to have good understanding, twelve had some partial understanding, but the remainder seemed completely uninformed. Table 29 reports the views of the parents toward institutionalization, with a breakdown according to whether the parents seemed to understand the guardianship procedure. It is shown that most of these parents reject institutionalization as a plan for their child. There seems not to be any substantial difference in parent attitudes toward institutionalization as related to their knowledge of guardianship procedures. Of the total group of 49 sets of parents, 12% indicate that they would consider committing their child to an institution even if the family remains intact. Thirty-eight per cent indicate that they would consider institutionalization if certain conditions in the institutions were improved. The remainder (50%) indicate that they would not consider institutionalization under any circumstances so long as their families remain intact. It is interesting to observe in this connection that only 27 per cent of the parents interviewed had ever visited an institution for the mentally retarded.

Table 29

Frequency Distribution of Responses of Parents Who Have Definite or
Partial Knowledge of the meaning of "state guardianship"
to Question 8c, "Assuming your family remains intact,
would you ever consider placing your child
in an institution?"

Consideration of Institutionalization	Definite Knowledge	Partial Knowledge
Will place	3	1
Will not place	9	7
Qualified	4	4
	16	12

Table 30 shows where parents have received their information on the State Guardianship plan. Again the table is presented with a breakdown according to the parents' knowledge of the plan. It may be observed that usually information about state guardianship has come from social workers or welfare agencies. Evidently not many doctors, teachers and others are suggesting to parents that they can consider this State plan. Considering the large number of contacts made with doctors and school teachers and this apparent lack of discussion of state guardianship plans one can only conclude that parents have had little opportunity to discuss fully the various opportunities for care of their children.

Parent Plans and Expectancies for the Future of Their Children

Table 31 reports responses of parents to questions concerning the expectancies they hold for their children as adults. It is shown that many of them expect the child to remain at home, but to be able to contribute to family life in some useful way. Parents of fourteen of the children expect that their children will be at least partially self-sufficient, perhaps working outside the home if a sheltered workshop or some other arrangement providing careful supervision can be found. Parents of twelve of the children indicate that they expect the children to eventually be self-sufficient;

only three definitely expect their children to be dependent in the sense of requiring institutional placement. When these responses are contrasted with data presented earlier indicating, for example, that perhaps half of the parents would consider institutionalization, it is clear that these parents are very uncertain and insecure as to what the future holds for their children.

Table 30

Frequency Distribution of Parents' Responses to the Questions 10b, "From whom or how did you first happen to hear about "state guardianship?" and 10c, "Have you gotten any other information about it since then?" Broken Down in Two Categories "Definite" and "Partial" knowledge of the meaning of State Guardianship and Tabulated in order of Diminishing Frequency
N=28

Source of Information	Definite Knowledge	Partial Knowledge
Welfare agency or Social Worker	7	5
Personal reading or Experience	4	2
Hospital or MD	4	0
Friends Assn.	2	0
Crowley PTA	2	1
Uncertain	2	4
School	1	0
Other parent	1	0
	*N=23	*N=12

**Totals exceed N of 28 who had some knowledge of State Guardianship since six parents with good knowledge of the provisions of State Guardianship reported two or more sources of information, while one parent with questionable knowledge reported two or more sources of information.*

When asked what specific plans have been made for the future of their child, parents gave the responses reported in Table 32. It is again indicated that parents plan for their children to remain in the community. Most frequently they picture the family or the individual himself as providing the necessary support. Eleven indicate that they have no specific plans for the future, two definitely plan for institutionalization and one expects that there will be continuing school arrangements, either public or private. Seven of the parents report that special insurance or other financial plans have been made to care for their children.

Dan Boyd has written an article called "Three Stages in the Growth of a Parent of a Mentally Retarded Child". (9) These stages are briefly as follows: (1) self-pity; (2) concern for child; (3) concern for all mentally retarded children. As part of the interview Kiland asked each set of parents, "What do you think is the thing for you, as parents, to do to aid other

Table 31

Frequency Distribution of Parents' Responses to Question 11a, "How much do you expect ______'s deficiency to handicap your child when he becomes adult?" Tabulated in Order of Diminishing Frequency

N=49

Parental Expectancies	f
Family worker in own home	20
Partially self-sufficient, work outside home with supervision	14
Self-sufficient	12
Completely dependent, institution	3
	N=49

Table 32

Frequency Distribution of Parents' Responses to the Question 11c, "What specific plans have you made for the future of your child?" Tabulated According to the Provisions Made and Arranged in Order of Diminishing Frequency

N=49

Provisions Made	f
Family or relatives will care for him	15
He will be able to care for himself	13
None	11
Insurance or other financial	7
Institutionalize	2
Schooling	1
	N=49

mentally handicapped children?" The responses are reported in Table 33. Referring to Boyd's article it appears that few of the parents included in this study have gone beyond the first two stages in development. Most of them either have not thought about the problem of helping other retarded children or feel that they have "their hands full" with their own children. Parents of nineteen of the children did seem to be at the point, however, of expressing a definite interest in the projects of parent groups. Some of them were willing to work with other parents in assisting them to a better understanding of their children and others were much concerned with furthering general public understanding of the problems of mental retardation.

Table 33

Frequency Distribution of Parents' Responses to the Question 12b, "What do you think is the thing for you as parents to do to aid other mentally handicapped children?" Tabulated in order of Diminishing Frequency

N=49

Best Method	f
Don't know	**17**
Hands full with own child	**13**
Join parent group	**11**
Help other parents individually	**4**
Educate the public	**4**
	N=49

The extent of parent participation in groups and organizations concerned with mental retardation is reported in Table 34. Twenty sets of parents belong to a PTA group organized specifically around the St. Paul Group II program and twelve belong to the Association of Friends of the Mentally Retarded. There are, however, seventeen sets of parents who belong to no such groups. Those who belonged to the various groups were asked what types of projects they found most interesting. Only seventeen parents were able to mention a specific project and these, in order of decreasing frequency, were as follows: fund raising, organizing Boy and Girl Scout groups, establishing a community nursery, getting motion pictures for the children and arranging recreational trips and activities for the children. Twelve of the parents had actually held office in one or more groups or been active on committees concerned with various projects.

Table 34

Frequency Distribution of Parents' Responses to the Question 12d, "Do you belong to any groups which are specifically concerned with the problems of the mentally handicapped?" Tabulated in order of Diminishing Frequency

N=49

Groups or Organizations	f
Crowley PTA only	**20**
None	**17**
Crowley PTA and the Assn. of Friends, MRC	**11**
Nonmembers who have attended meetings	**2**
Assn. of Friends, MRC only	**1**
	***Total 51**

Total exceeds N since "Nonmembers who have attended meetings" are also tabulated in the "None" category.

The Extent of Parent Reading on Child Care and Mental Retardation

Parents were asked what reading they had done which was helpful to them in the care and training of their children. About two-thirds of the parents (64%) were able to specify at least one publication which they had read and found helpful. There was a very definite trend toward more reading among parents of the younger children. A great variety of materials was listed by parents. Those mentioned by two or more parents are listed in Table 35. "Teach Me", published by the Division of Institutions, State of Minnesota, holds a strong first place as a source of help to these parents.

Table 35

Frequency Distribution of Parents' Responses to Question 13a,
"What reading on mental deficiency or child care
have you done?" Tabulated in Order
of Diminishing Frequency
N=17

Publication	f
Teach Me	10
Infant Care	5
Journal of Exceptional Children	3
Pocket Book of Infant and Child Care	3
Your Child from One to Six	3
American Journal of Mental Deficiency	2
Parents Problems with Exceptional Children	2
	*Total 28

**Totals exceed "N" since several parents mentioned more than one publication.*

Parents Knowledge of Developmental Concepts

Parents were asked whether they had any knowledge of what the Intelligence Quotient represents. Only one parent indicated a clear understanding so far as the experimenter could judge. Twenty-five parents gave such responses as "indicates how bright a child is", but could not be more specific. Others had no idea as to what an IQ might be. They did, however, usually know that the term was frequently used in schools and that somehow the IQ was relevant to decisions the schools made about their children. Thirteen of the parents indicated, however, that at some time they had been told what their child's IQ was. School teachers and doctors were reported to have made such revelations to the parents. Parents were also asked whether they knew what "Mental Age" meant and in this instance Kiland judged that two of them were able to give clear meaning to the term. Generally the parents were observed to be quite uninformed concerning developmental concepts, this being more true of fathers than of mothers. This is shown, for example, in the report that in nearly every case the mother recognized the retarded child's deficiencies before the father came to such a realization.

Summary

The present study is concerned with parents of retarded children enrolled in Group II classes. It is shown that the parents have often not succeeded in obtaining early diagnoses of their children's condition and that usually they have not had early help in planning for the care and training of the children. Most parents prefer keeping their children in the home even into the adult years, but look to the school program for assistance in developing social skills and self-help habits which will make their children happier and more productive. Some of the parents seem quite unrealistic in their expectancies for the children, this probably reflecting again the lack in information and counsel given them. The total information presented in this chapter gives strong testimony to the need for professional workers to improve their skills in dealing with these parents.

CHAPTER VI

A QUESTIONNAIRE STUDY OF PARENTS

Ellis (19) reports another study concerned with parents of severely retarded children in the Twin Cities area. Her population was different from that of Kiland's study (37) in that she included only parents whose children were not in public school classes. All of the parents indicated, however, that they would enroll their children in public school classes if adequate facilities were available. For this reason the Ellis data seems pertinent to the immediate problem of public school Group II programs.

The study was done by means of a mailed questionnaire.[1] Thirty-five sets of parents responded to the questionnaire, which represented about a fifty per cent return. These thirty-five replies gave information on thirty-six middle-grade defective children. Of these children, twenty-nine were attending a private day school in Minneapolis, three were in institutions and four were at home and not attending school.

Because of several selective factors, including willingness to answer the questionnaire and financial ability to send children to a private school, it cannot be assumed that these parents are representative of all the parents of severely retarded children. It does seem likely, however, that they do represent quite well the parents who are most anxious to enroll their children in public school classes of Group II type.

In education and socio-economic status the parents responding to the questionnaire are somewhat above the average for the general population, but perhaps not as far above average as would be expected of a group most of whose children attend a private school. The median educational attainment of these parents is high school graduation and the mothers tend to be better educated than the fathers. About one-fourth of the mothers work and many of them report that they do so in order to pay for their child's schooling.

As an indication of socio-economic status, the occupations of the fathers of these children have been classified according to the Minnesota Scale of Paternal Occupations and Table 36 compares the figures obtained with those of the male population of the U.S. as of the 1940 census. The results show that these families are somewhat above the national average in socio-economic status, but not markedly so.

Table 36

Occupational Rating of 35 Fathers of Middle-Grade Retarded Children and of the Male Population of the United States in 1940

	Type of Occupation	Fathers		U.S. Males
		N	%	%
I.	Professional	1	3	3
II.	Semi-professional, managerial	6	17	7
III.	Clerical, skilled trades, retail business	13	37	14
IV.	Farmer	1	3	15
V.	Semi-skilled, minor clerical and business	10	28	24
VI.	Slightly skilled, jobs requiring little training	2	6	15
VII.	Day laborers	--	--	22
	No information	2	6	--

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[1] *See Appendix C for a copy of the questionnaire.*

The parents reported their ages at the time of the child's birth. The fathers' ages seem to follow an expected distribution for a general population of fathers. The mothers' ages, however, tend to pile up in the thirty-five to thirty-nine year age range, this single five-year span accounting for about one-third of all the children. Several studies have shown that the mothers of Mongolian children tend to be older than the average mother. There are quite a few Mongolians included in this study and this perhaps explains the age tendency.

Tables 37 and 38 show when and how the parents discovered that their child was defective.

Table 37

Child's Age When Defect Discovered

Age	N
Birth - 1 week	6
1 week - 5 mos.	5
6 - 11 mos.	5
1 - 2 yrs.	8
3 - 5 yrs.	8
at school age	2
no information	2

Table 38

How Defect Was Discovered

Source of Information	N
Told by Doctor	13
Seizures	3
Developmentally Slow	
(a) compared with others	5
(b) poor speech development	6
(c) other developmental failure	5
Psychological Examination	2
School Difficulty	1

These children are middle-grade defectives. Developmentally and mentally they were never more than half as advanced as normal children for their ages, yet over half of them were one year of age or older before their parents recognized that they were defective and one-third of them were three years or older before the parents knew that there was anything wrong. This is a tragic situation for both the child and the parents. Of course any parent is reluctant to admit that his child is different but the facts also suggest that the parents either did not seek professional help or were unable to accept the information that their child was retarded when it was offered. In either case there is obviously a need for more and better study of infants and for more interpretation of difficulties in terms that the parents can understand and accept.

Tables 39, 40 and 41 show where the parents went for help once the condition had been recognized, what help they got, and how they feel this help might have been more useful. Some parents gave more than one answer and others did not respond at all so the total number of responses does not add up to thirty-six. All but a few of these parents sought competent professional help with their problem. The people to whom they turned should have been able to provide adequate diagnosis, information, and advice if this was desired. In spite of this, many of the parents expressed strong feeling that they had not received the information, sympathy, or treatment that they or their child needed. Only five out of the entire group said that they felt that everything possible had been done. In part this may be a justified complaint rising out of the professional person's sincere but misguided desire to shield the parents from the full realization of the gravity of the defect. Often, however, the parents' dissatisfaction probably arises, not from any lack of information, but from the way that it was offered, which makes it impossible for the parents to accept the fact that their child is retarded. This should alert all people who are working with parents such as these to the need for improved interpretation and counseling techniques.

Now let us consider the characteristics of these thirty-six children. Their ages range from four to nineteen with the great majority falling between six and fifteen. Seventeen of the children are reported to have physical handicaps, no response was made to this item in six cases and twelve

Table 39

Where Went for Help

Source	N
Family Doctor	15
Pediatrician	11
U. of Minn. Hospital	9
Other Hospitals	6
Public Schools	5
Child Clinics	2
Private School	2
Social Agencies	2
Chiropractor	1
No Prof. Help	2

Table 40

Help Received

Help	N
Physical Treatment	7
Adequate Information and Diagnosis	2
Inadequate Information and Diagnosis	9
Advice on Training or Placement	6
No Help Asked	3
No Help Received	8
Speech Training	1

Table 41

How Help Could Be More Useful

Way	N
More Frank Information	10
More Sympathetic Treatment	6
Better Physical Treatment	4
School Acceptance	4
Speech Training	1
Info. about Friends of Mentally Retarded	1
Everything possible was done	5

are reported to have no such defects. Among the handicaps reported are cerebral palsy, spasticity, eye defects, deformities, speech defects, spinal bifida, hydrocephaly, mongolism, hearing deficiencies, paralysis, and poor muscular control. The prevalence of severe physical defects among children of this mental level is an important factor to consider in planning for their training.

The following tables give the parents' ratings of their children's personal and social adjustment. The totals are not always 36 because not all parents responded to each question. On the whole it appears that the parents think that their children are fairly well adjusted. The adjustment of this group should not be taken as representative of all children of this mental level since in several ways this is a select group.

Table 42

Following Directions

Rating	N
Good	12
Fair	10
Poor	10

Table 43

Expression of Needs and Wishes

Rating	N
Speaks Well	20
Fairly Well	2
Speech Limited	11

Table 44

Anger Outbursts

Rating	N
Frequent-Severe	10
Moderate	16
Seldom	9

Table 45

Playing with Other Children

Rating	N
Plays Acceptably	20
Some	4
Little	9

Table 46

Behavior with Adults other than Parents

Rating	N
Good	24
Gives Difficulty	9

Table 47

Freedom around Home and Neighborhood

Rating	Home N	Neighborhood N
Normal for age	26	11
Needs Supervision	8	24

Table 48

Acceptance of Child by Neighborhood Children

Parent Responses	Accepted N	Picked On N	Teased N
Yes	19	3	4
Sometimes	12	15	17
No	4	17	14

Table 49

Parents' Fear that Child will Harm or be Harmed by Others

Fear Expressed	Yes N	No N
Fear he will hurt others	11	23
Fear others will hurt him	6	27

Some of the implications for educators in these findings are as follows. About two-thirds of these children are reported to speak well but about this same number have difficulty following directions, have anger outbursts, need supervision around the neighborhood and are sometimes picked on by other children. About one-third of the parents fear that their child might harm other children. They mention as possibilities: unintentional harm to a baby and too rough fighting back when teased. They fear that their own children might be pushed around, teased, have stones thrown at them, have their feelings hurt, be sexually exploited, or be blamed for acts of others. These are factors that have to be considered in any school situation where normal and middle-grade retarded children would share the same building and playgrounds.

Table 50 shows the ability of these children to feed and dress themselves. The parents report that almost all of them are toilet trained, which would be expected since this is one of the requirements of the school which most of them attend.

Table 50

Ability to Feed and Dress Self

	Eating N	Dressing N
Independent	29	15
Needs Help	7	21

The children's use of books and other recreational activities are given in Tables 51 and 52.

Table 51

Use of Books

Responses	N
Reads	4
Looks at	23
Plays with	3

Table 52

Recreational Activities

Type	N
Nursery School Toys (ex. blocks)	34
Active Physical Play (climbing)	21
Quiet Play Skills (crayons)	12
Recreational Skills (skating)	7
Passive Spectator (radio, movies)	22

Although many of these children have been in school for years only four of them are reported to be able to read at all. Most of them look at pictures in books for enjoyment, however. The list of recreational activities is included to give some idea of the children's developmental level and of what might be useful with them in school. In general, the things mentioned are popular with normal two to six year olds, with a few activities being on a more mature level. Most of the children were reportedly careful not to break things.

These children have attended a number of other types of schools besides the private school in Minneapolis. These include other private schools, public schools, nursery schools, speech and orthopedic schools, and institution classes. The mean length of attendance at the private school was three years. One child had attended for thirteen years. The average length of time spent at other schools was one year.

The parents' responses to the question "How long do you expect your child to remain in school?" were varied. Ages mentioned ranged from fourteen to twenty years. Most of the parents' answers were qualified with such statements, "as long as the school will accept him", "as long as he is making progress" or "as long as we can afford it". The parents in the last mentioned group particularly expressed hope that public school facilities would be available soon.

The parents were asked how much more progress they expected their children to make in self-help, improving habits, reading, writing and arithmetic. Most of the answers were given in general terms indicating that the parents didn't have any definite goals in mind, but most of them expressed hope that some progress would be made. A few parents expressed unrealistic goals, e.g., that the child would achieve at a normal rate in academic subjects. The most common attitude was an uncertainty about what the child would be able to do, but a belief and hope that schooling would be beneficial. They were most optimistic about the "improving habits" and "self-help" areas and expected least progress in reading. This is in line with what is known about what these children can learn. While many were hopeful of progress in writing and arithmetic, the goals that they verbalized were often modest, such as writing one's own name and being able to recognize coins.

Table 53 gives answers to the question "What plans do you have for your child after he leaves school?" The four children expected to be gainfully employed are all under 10 years of age. It seems that as the children grow older the parents become more aware of the child's limitations and alter their plans accordingly.

The parents were also asked if they thought that their children would ever be self-supporting. Their responses are found in Table 54. The job possibilities mentioned included routine assembly, drummer, anything except office or engineering, farm work, common laborer, caretaker, gardener, and sheltered workshops. Thus it can be seen that most of these parents have fairly realistic aims for their children, but that a few have far too high hopes.

The parents were also asked to express their attitudes toward state guardianship and residence institutions. Tables 55 and 56 summarize their responses on these matters. The outstanding fact

Table 53

Plans for Child After He Leaves School

Plan	N
Gainful Employment	4
Help in Family Business	7
Stay at Home	5
Institutional Placement	6
No Plan at Present	14

Table 54

Parents' Estimates of Their Children's Ability to be Self-Supporting

Self-Support Expectancies	N
Will be self-supporting	2
Perhaps - Hope so	7
Some work under supervision	6
Probably not	4
Will not be self-supporting	10

Table 55

Parents' Attitudes Toward State Guardianship

Responses	N
Synonymous with institutionalization*	12
Child now committed	4
Useful as insurance	2
Not now	6
Disapprove	5
In institution now	3

**State guardianship does not necessarily imply institutionalization in Minnesota.*

Table 56

Parents' Attitudes Towards Residence Institutions

Responses	N
Now placed	3
Planning to place	3
Perhaps later	16
Private institution only	3
Not for "our" child	9
Criticism of institution	4

emerging here was that in the minds of many parents state guardianship and institutionalization are synonymous. This indicates a need for much education and clarification on this point. Many parents were hostile to both state guardianship and institutional care. Some were critical of the way that institutions are run or felt that such care should be used only in an emergency.

To the question "Would you send your child to a public school if the facilities were available?", 26 parents said "Yes, definitely" and the other 9 said that they would under certain conditions. The reservations mentioned included: that the training be as good as that at the private school, that the child be kindly treated, that the teacher and facilities be adequate.

The parents had widely differing opinions about what public school classes should be like. Suggested age of entrance varied from three to eight and age of leaving from twelve to twenty-one. Suggested number of children per class ranged from 8 to 30. Some parents thought that these classes should have a separate building while others suggested a room in a regular school building. Most parents agreed that the middle-grade defective child should not mix with other children on the playground and should be transported to school by busses. Many expressed the opinion, however, that these matters should be decided by the school officials.

As to the school program, parents thought that a wide variety of social experiences should be provided. Those mentioned included scouting, parties, tours, dancing, plays, games, movies, sleigh rides, open house for parents, visits to parks, music, and picnics. In the academic area twenty-five of the parents thought that their children should be taught as much reading, writing and arithmetic as they could learn. Only two parents failed to mention these academic areas. Opinions ranged from "these classes should be taught like regular school" to "the 3 R's should only be included as games." Most parents thought that manual training should be given for those with aptitude for it and three thought that this was more important than the academic area. Others suggested specific training such as art, domestic science, weaving, farming, and the use of janitorial equipment.

In order to get an approximate priority rating among various kinds of school learnings suggested the parents were asked what they considered the most important things that the school could teach their child. Many of them mentioned more than one goal. Their responses are given in Table 57. It is to be seen that social skills and adjustment are by far the most important things that the school can teach, according to parent statements. Only a third of them think that academic training is very highly important and only four parents think that trade and vocational training are important functions of the school. Several mention that the child's increased ability to help himself and increased self-confidence as very important.

Table 57

What Parents Consider the Most Important Things that the Schools can Teach Middle-Grade Retarded Children

Type of Training	N	Type of Training	N
Academic	11	Speech	2
Trade and Vocational	4	Sex Training	1
Character	5	Music	1
Personal Habits	3	Manual Training	4
Self-confidence and self-help	9	Culture	1
Social Skills	25	Gymnasium	1
Handling money	3		

On an allied question, "What do you think these children should have learned when they finish school?" they made the responses given in Table 58. Many qualified their answers saying that it depended on the individual child. There is some discrepancy between what the parents feel are the most important things that the school can teach and what they expect that the child will have learned. This may be because they know that the children cannot learn all the things that they

Table 58

What Parents Think Middle-Grade Defective Children Should be Able to do at the End of Their Schooling

Ability	N	Ability	N
Read	7	Dress self	2
Write	6	Social skills	8
Write name	2	Adjustment to world	3
Simple arithmetic	1	How to make things	3
Speech	2	Hobby	2
Earn living	7	To be less dependent	1
Handle money	3	Care of self	2
Depends on child	10		

consider desirable but they may feel that the children should be exposed to this training anyway in the hope that they will obtain some benefit from it. The majority of the parents' goals are not too unrealistic. Most of them thought that what is taught should depend upon the individual child or that the end result should be better social adjustment, self-care, or some activity that the child could use for his own amusement.

Summary

The findings in the present study are essentially the same as those reported by Kiland. The parents have not secured early diagnoses, often their attitudes toward persons and agencies doing diagnoses are unfavorable, and they feel uncertain and insecure about the future for their children. As a group these parents are of a higher socio-economic level than those who have children already enrolled in public school classes. Perhaps they have more often had the advantages of expert help in understanding their children and seem relatively more aware of their children's limitations than are parents who have had less help. They want to place their children in public school classes if such classes are well conducted. They seem quite realistic about what might be expected of school programs, but cannot specify in detail just how the school program should be conducted. Above all else, they hope that the schools can teach the children social skills which will make them more acceptable in family and community life. They feel that school officials and teachers will know how to develop details of the school program to attain this end.

CHAPTER VII

PROBLEMS OF DAY SCHOOL CARE

It is clear that public school day programs can be established and maintained for severely retarded children. This is demonstrated in the pioneer efforts of St. Paul schools in this field. A program has also existed in the Duluth schools for many years and several cities outside Minnesota have had long experience in this type of project. Teachers and parents close to these programs usually report favorably on them. They feel that the children make substantial gains in self-help skills and in social adjustments which make their lives happier and more productive. They feel also that there are real services to the families of these children as the schools take responsibility for the supervision and training of the youngsters for some period each day.

Undoubtedly the children do make gains as they attend the classes and perhaps there could be further gains if the school programs were improved. Unless and until there are improvements in the educational or training methods, however, the experience in St. Paul and elsewhere, as summarized in this report, demonstrates equally that there are definite limitations in what can be achieved in Group II programs. The available data and experience do not clearly indicate whether public school programs make any significant contribution to the solution of the fundamental problems of the severely retarded. Even less is there indication that public school programs represent the best type of program. The situation is marginal and much given to differences of opinion, even among professional people.

Those expressing opinions on the question can be divided roughly into three groups: (1) those strongly favoring; (2) those who think that it is a workable but not entirely desirable solution; (3) those who are strongly opposed to public school education. Each point of view and the reasons for it will be examined below.

Strongly Favorable

"A significant impetus for the establishment of day school classes for the more severely retarded children has gained considerable momentum during the past three or four years. The children for whom these services are sought are those not eligible for existing special classes and who would presumably measure in the IQ classification below 50. This development has had it's roots in a 'parent's movement' but in some instances educators have given considerable encouragement to the leadership of parent organizations" (32).

Speaking for the parents, Joseph Weingold, Executive Director of the Association for the Help of Retarded Children writes, "It is our contention that it is the function of the community to provide training and educational facilities, not only for those considered eligible for the special classes in the school system (and many communities do not have even these classes) but also for those who are considered the institution type whatever that means on the basis of a certain IQ level" (65).

The reasons usually advanced in support of public school training for the severely retarded include the following:

1. **Every child in a democracy is legally and morally entitled to a public school education, even though his progress in learning may be exceptionally slow.**
2. **Many parents do not intend to institutionalize their children and feel that community educational facilities should be available to them, even though the educational program required may be atypical.**
3. **There are just not enough public institutions to care for all the children of this mental level. Therefore, if many of them are to receive any training at all it must be done in the public schools, private schooling being beyond the means of all but a few parents.**

4. It is believed that many retarded people can be trained to make an acceptable social and occupational adjustment under optimal conditions; e.g., school training, home care, and sheltered workshops.

5. Some people feel that these children are happier, better cared for and develop further in their own homes than in an institution.

6. The cost of the public day school training is less than the cost of full time care in an institution.

7. One can never be sure of any child's potential until every effort has been made to teach him all that he can learn.

J. E. Wallin is one of the major advocates among professional people of public school training for the severely retarded child. He writes, "The vital concern of the state is in the control of mental defectives who threaten to become a social menace. It is not primarily concerned with mental defectives whose parents are willing and capable, financially, morally, and intellectually, of providing proper support, protection, control, and training and the public should not be required to assume the burden of support of such cases. That is the parent's privilege and duty" (63). He believes that the primary obligation for educating mental defectives lies with the public schools. Only those children who cannot be managed at home or whose home environment is inadequate should be in public institutions. He thinks that public school classes should be provided for all children above a mental age of three years or an IQ of 30, and that those limits should be flexible. Because of limited institutional space and the cost of institutional care he feels that, "To advocate the removal of defective children from good responsible homes which are providing adequate care, notwithstanding the parent's protests, is to indulge in a preposterous vision, even when the purpose is laudable" (63).

Ray Graham, Illinois State Director of Education of Exceptional Children, has also strongly advocated the establishment of public school programs for the severely retarded (27). He gives emphasis to the benefits which would come to society as well as to the retarded children as there is "local community understanding and participation." He rejects the argument that removal of retarded children from the home presages greater emotional stability within the family and believes that the experience in parent-sponsored classes in Chicago already indicates the success of community programs. Graham also rejects the view that the problem is one for Social Welfare Agencies rather than the schools and argues instead for school leadership in a gradually developing program.

Public Education is Workable but Not Ideal

Many people believe that institutional care for the severely retarded child is the best solution but because of the limited facilities and the unwillingness of parents to part with their children, it is felt that there are children in the community who can only be served by public school classes. Meta Anderson writes, "Whatever the opinion about keeping these children in the public schools, it is true that they are there, and must remain there for a long time to come, the length of time depending on how long it will take public opinion to recognize the true defective and upon how long it will take public opinion to build institutions for their permanent care" (2). Goddard (26), studying the problem in New York, found that both teachers and principals felt that the children belonged in institutions but at the same time they recognized that few parents would agree to this. Under these conditions, Goddard felt that the public schools must take responsibility for educating these children, insofar as that is possible.

Bower (8) in discussing the California program stresses the need for part-time nurseries and daytime schools to relieve the parents of their responsibilities for a few hours a day. He points out that many of these children are on an institution waiting list but must remain in the community because of overcrowded conditions. The Connecticut Special Education Association feels that the community should take on this public service as a welfare undertaking (12). They also stress that if these children are ever to be admitted to school (the Connecticut law reads MA of 5 or IQ of 45) they should be admitted to low special classes at an early age before bad habits are established and the opportunity for early training has been lost.

Kirk and Johnson in Educating the Retarded Child (39) sum up their viewpoint as follows: "Public schools can organize custodial classes within the public school system for the care, training and supervision of the trainable mentally defective child. Such an organization would attempt to assist parents in caring for the child at home and would supervise them several hours a day in public school classes. It would not be expected that such children could be educated to care for themselves at the adult level, but through training, not education as we usually conceive of it, could be taught to function socially at a higher level around the home and neighborhood. This is a method sometimes preferred to commitment to an institution, since it assists those parents who maintain responsibility for the child at home. The child's care and supervision in the home assisted by a public school class is not at present an established procedure. However, such community organization will lessen the burden on those parents who wish to provide for their own children. The group that must be excluded from such classes consists of those children such idiots, who cannot be trained in the simplest routines of life" (39).

Opposed to Public School Training

Opposition to public school programs for severely retarded children comes from not a few educators and professional people concerned with the problems of retarded children. The reasons given for their beliefs might be summarized as follows:

1. Experience has proven that the ability of these children to learn is very limited.
2. The value of the training is not worth the expense that it entails.
3. The function of the public schools is to educate; not to provide custodial care.
4. Severely retarded children almost never become adequate adults either socially or vocationally.
5. Considering the present shortage of trained teachers, it is wasteful and shortsighted to take teachers needed for more able groups to teach these children.
6. Providing public schooling sometimes raises false hopes in the parents for the child's future adjustment, thus delaying both acceptance of the problem and realistic planning for the child.
7. Keeping a severely retarded child in his own home seriously handicaps the freedom, productivity, and mental health of other normal members of the family.
8. A severely retarded child is happier in a sheltered environment where he is not forced to compete and compare with normal members of society.
9. A severely retarded child is best trained in an environment that is geared to his level at all times.

Quotations from some of the leading authorities on mental deficiency are presented below; they will best reveal their views on public school education for the severely retarded child.

Descoeudres writing about special classes for the severely retarded child says, "they ought not to appear there at all, their proper place being the residential school" (15). She thinks that the atmosphere of a residential school is more conducive to stimulating them to maximum functioning than is a special class no matter how well organized the class may be.

Speaking of the severely retarded adult Tredgold says, "They are quite incapable of adapting themselves to anything out of the routine to which they have been accustomed and it is doubtful whether the work they do (in institutions) is worth the supervision that it entails. None of them contribute at all appreciably to the cost of their keep. In fact, a majority of them even as adults have to be supervised in their washing, dressing, feeding, and general behavior very much like young children" (58). He states that they are trainable only in occupational centers and institutions.

Doll expresses the view that, "They are more successfully trained in public institutions than in public schools. Their training is limited to the formation of specific habits in social and occupational adjustment" (16). Other opinions run as follows: "It is better for the child, to deny him the right to go to school if the IQ is below 50....He requires a type of care, treatment and training that few public schools are able to provide" (Berry, 5). "The possibility of education for (the severely retarded child) is so limited that they can be cared for only in institutions" (Heck, 30). "Basic to all public school activity is learning....The cut-off point for educability is approximately Binet IQ 50" (Birch, 7).

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But a decision to establish or not to establish the classes is, of course, only a part of the problem. There is need to know how the classes might be organized and administered. These, too, are problems which have had but little attention. In the foreward to Hill's Bulletin (31), Reed and Jones summarize these further problems as follows:

> "There are many important questions to be answered in venturing into this relatively new field of service. How to identify the children who should be served, how to fit the extended provisions into existing special education programs and the total educational services of the schools, how to integrate the program with the medical and social welfare services of the community, how to select and plan classroom activities that meet the needs of the children, how to provide for parent participation and counseling, how to select teachers, and how to deal with administrative details relative to housing, pupil transportation, and financial support will need to be considered. It must be recognized that a thorough treatment of all of these and many other important factors is not possible at this time. There has been too little development in the field to point up programs that have been successful in various types of communities, neither has there been produced a body of research which would point the way to good public school practices in this new field of special education" (31).

It has been the aim of this report, by reviewing literature and experience and by presenting some new research information, to provide some little light on a few of these many problems.

The Broader Problem in Minnesota

It seems obvious that public school programs, even if available in sufficient numbers, cannot fully encompass and solve the problems of severe mental retardation. Mental retardation exists from birth on through the full life span of an individual and any program which covers only a limited age range will lack significance except as there is carefully integrated planning for a broader program. The present report reveals at least three areas, beyond the immediate matter of public school programs, in which there seems to be need for planning in Minnesota:

1. The Early Childhood Years. The data of Chapters 5 and 6 indicate that a tragically large number of parents have failed to secure adequate and early diagnostic information concerning their retarded children. Many parents report that their first encounter with the implications of their children's limitations came at the time the children were presented for school entrance. About one-third of the parents report that they have received inconsistent diagnoses by professional people. There is also indication that very few parents have had the advantage of working through possible plans for their children with doctors, psychologists, social workers or others during the very early years. The lack of contacts with social workers and psychologists is particularly striking. Parents perceive contacts with social workers as presuming plans for institutionalization and thus very often avoid contacts at the "court house".

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Such contacts as are made with doctors, social workers and others are often reported by parents as unfavorable in outcome. They very commonly feel that they received very little help. It is recognized, of course, that it is difficult and time consuming to work through these problems with parents, yet it is done better and with much saving in anxieties if accomplished early. If youngsters are presented to the schools without earlier help, the teacher, the child and the family all face a difficult situation. Surely this problem deserves heightened attention by those professions which come into early contact with the families involved.

2. The Adult Years. Parents looking to the future for their retarded children in Minnesota again face a difficult situation. Many of them reject institutionalization as a long-range plan and there are no sheltered workshops for the retarded. Only a few of the severely retarded succeed in community employment outside their own homes. Yet many parents expect that their children will be at least partially self-dependent as adults and look to the school programs for aid in attaining this goal. Again there is reflection of the fact that parents have often lacked information and counsel. But beyond this there is need for more imaginative planning to provide a greater variety and flexibility in adult programs for the retarded.

3. Integration of Services. Implied in all of the above is the need for offering comprehensive and carefully integrated services to retarded children and their families. The present organization[1] of the State government, as it is reflected in the counties and local communities, often operates to offer the services of social workers to some, the services of the schools to others, but seldom the services of both to anyone. Some diagnostic and counseling services are available only, or restricted largely, to those under guardianship of the State. Too often service is limited and assumes adequate planning before services are sought. There is, at least in the parents' perception, no one source of full information and counsel. A sign of the reality of this situation is found in the fact that no single State publication fully comprehends the services of the State to the retarded, although there are disjuncted departmental materials available.

It would seem that there is need for coordinated study by the several departments of the State government concerned with mental retardation, to explore possibilities of integration in services.

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[1] *Including problems of policy, personnel, and appropriations.*

APPENDIX A

MINNESOTA STATE BOARD OF EDUCATION

PROCEDURES AND STANDARDS

CLASSES FOR MENTALLY RETARDED CHILDREN

INSTRUCTION OF HANDICAPPED CHILDREN

General Standards

CLASSES FOR MENTALLY RETARDED CHILDREN

1. Law: Laws 1949, Section 131.11

"Upon application made to the state commissioner of education by any school district complying with the provisions of section 128.13, he may grant permission to such district to establish and maintain within its limits one or more classes for the instruction of mentally subnormal children who are residents of the state, provided there shall not be less than five mentally subnormal children of school age in actual attendance."

2. Regulations

a. Establishment of classes or home instruction.

(1) Application shall be made to the State Commissioner of Education to establish one or more classes for the instruction of mentally retarded children, provided there shall not be less than five mentally retarded children for each class.

(2) Home instruction for individual children may be established by the Commissioner of Education where necessary.

b. Admission

(1) Admission to special class or home instruction will be restricted to pupils, residents of the state, who are approved by the Commissioner of Education as in need of special educational services because of mental retardation which is sufficient to make inadequate the education offered by the public schools, without special education provisions.

Two levels of retardation are considered:

(a) Group I--composed of those retarded in mental capacity but for whom some likelihood of self-support can be anticipated in their future. In this sense self-support includes some degree of occupational, economic and social independence, even though supervision is necessary, depending on the nature of the community and the individual's personal development and his opportunity for adjustment.

(b) Group II--composed of those retarded in mental capacity below the level of self-support, but for whom a positive result can be anticipated in education of social, emotional, physical, as well as more commonly accepted patterns of learning.

(2) Admission will be based on the results of complete psychological examinations, supported by additional medical, psychiatric, and social findings which may be desired in each particular case. Psychological examinations will be conducted only by certified psychologists.

Bases of acceptance will include:

(a) Adequate mental testing consistent with each case.
(b) Measures of social, emotional and physical maturity.
(c) Developmental case history.
(d) Estimation by psychologist as to education from which the individual child can profit.
(e) Physical examination with special attention to sensory defects.
(f) Additional pediatric, neurological and psychiatric examinations available through established facilities in all doubtful cases.
(g) Consideration of actual local school and community facilities and conditions in the final decision.

(3) The fundamental philosophy of the examination which should prevail will be proper placement for the maximum benefits to all as individuals and groups. There are no known methods of increasing the mental capacity if mental retardation is correctly diagnosed. Education is a possible means of improving the behavior and performance within limits of the individual's capacity. The development and evaluation of the educational techniques must be an integral part of this program.

For Group 1 the purposes include:

(a) Conformity to social custom and law through habit training and the development of good character and behavior traits.

(b) Employability through development of good work habits and development of responsibility and reliability.

(c) Good citizenship through careful training.

(d) Training to accept and profit by supervision as necessary.

(e) Education in usual academic and vocational school subjects commensurate with the ability of the individual.

(f) Acceptable social and emotional patterns of behavior.

For Group 11 the purposes include:

(a) Improvements in habits of self care.

(b) Social behavior: as acceptable as possible to other people, in terms of conformity.

(c) Self-reliance in areas of constructive activities and good habits of using time.

(d) Good emotional habits in terms of increased control.

(e) Cooperativeness in terms of developing comprehension to its limits and good acceptance of authority.

For the purposes of estimating the numbers of children who might be eligible, the top level of mental capacity considered to need special services will be in the vicinity of I.Q. 80. The approximate dividing line between Group 1 and Group 11 will be I.Q. 50. Actual placement may include I.Q. points in either direction for either group.

Where doubt exists trial periods up to six months shall be provided. Extension of the trial period may be made only by approval of the Commissioner of Education. Recommendations of teachers and principals (or other administrative officers) shall accompany reports to the State Department of Education at the end of the trial period.

Each child shall be retested periodically.

No child shall be admitted to special classes who, in the judgment of examiners or after a trial period, indicates a need for an undue amount of individual attention from the teacher. Minimum level includes such factors as ability to feed himself, take care of toilet needs, freedom from extreme crippling or other physical defects, absence of severe emotional difficulties and ability to make some behavior progress in the group.

c. Size of class.

(1) The minimum number of enrolled pupils per teacher shall be five.

(2) For Group 1--the maximum number shall be 15, except that, in schools employing more than two teachers of mentally retarded children in the same building, the maximum shall be 18.

For Group 11--the maximum number shall be 8, except that, in buildings containing more than two such classes, the maximum shall be 10.

There shall be no overlap in the types of classes unless specifically approved by the Commissioner of Education.

d. Types of facilities.

The preferred plan for education of children retarded mentally will be in special classes within the local school district.

Where, because of local conditions, local special classes are not feasible, plans for these children might include one of the following:

(1) Children may be enrolled in near-by districts or combined districts having such a class. Transportation may be daily or weekly. If weekly, boarding arrangements will be a consideration.

(2) Home instruction may be used where special classes are not available or are not suitable for the individual child. This may include actual teaching in the home by a qualified teacher.

e. Instruction

The instruction in these classes shall be largely from the individual standpoint, based upon the capacities, interests and needs of the pupils to the extent to which these may be ascertained. Wherever feasible, arrangements should be made for Group 1 pupils to be associated with children in regular classes in such areas as assembly, music, art, physical education, recreation, shop and home economics. Greater benefits will be accorded to Group 11 children if they are housed in separate buildings. Whatever the housing arrangements, careful study shall be given to estimating values and effects concerning groups in various activities. Continuous supervision would always be necessary.

The above statements are based on the objectives:

(1) To improve mutual understanding and tolerance among all children.

(2) To enrich and broaden the experiences of Group 11 children.

f. Length of day

The length of the school day for mentally retarded children should equal as a minimum that of the regular grades. In no event should it be less than five hours. The lunch period should not be counted as part of the school day.

Mentally retarded pupils must be taught many things that other pupils learn through contact with their environment. They need longer periods to acquire information and skills and to make social adjustments.

APPENDIX B

INTERVIEW GUIDE SHEET

(See Chapter 5)

INTERVIEWERS GUIDE: Study Parents of Mentally Retarded Children

1. a. Mrs.___, how old were you when_____was born?

   b. When did you first suspect that he/she might be different from other children?

   c. What gave you the first reason to think that___might be a little slower in developing than other children?

   d. How old was____when he: attained bladder control
   attained bowel control
   began to drink with cup or glass
   began to walk
   began to talk
   began to speak sentences

   e. How old was____when you became sure that he/she was going to be a little bit slower in developing?

   f. What made you sure?

2. a. Where did you first turn for help? (Agency, profession, etc.)

   b. How did you happen to use these facilities?

   c. What did they do?

   d. Were you satisfied?_____yes_____no. Why?

   e. Who else have you seen about your child? (If not mentioned, specify: Physician
   Social Worker
   Teacher
   Psychologist
   Psychiatrist)

   f. (For each above)

   How contacted?

   Kind of information or assistance given? How did they help you?

   Why was this help valuable or not?

   g. What person or agency, etc. has been most valuable to you in understanding your child?

   h. What service did not seem to be of much help?

3. a. Has there ever been any difference of opinion about your child's handicap?_____yes_____no.

   b. What professional status or agency or other category, friends, etc.?

   c. What was the basic for these differences of opinion?

   d. When did this happen? (Get point (s) in chronology of investigation of child.)

   e. How did you feel about this conflicting information?

4. a. What is the main way in which ___ seems to you to be different from other children?

   b. What was your greatest concern (problem, worry) with ___?

   c. What kind of help did you want to deal with this?

   d. What sort of help did you receive?

   e. Where did you get the most useful help?

   f. How was it given?

5. a. What do you think the most important job of education should be?

   b. What do you believe the most important job of special classes?
   What is the main thing a child should get out of a special class?

   c. What does it seem to you that they are doing?

   d. Do you believe the special classes are doing a good job? _____ yes _____ no.
   _____ qualifications.

   e. What do you expect _____ to get out of the special class that he/she is attending?

   f. What would you like _____ to get out of his/her special class training?

   g. What do you expect the special class to teach ___ about:
   What would you like the special class to teach ___ about:

   Reading
   Writing
   Arithmetic
   Safety
   Care of himself
   Work habits
   Work skills
   Art, music, etc. skills
   Art, music, etc. appreciation
   Personal behavior habits
   Manners
   Adult social behavior
   Recreation

7. a. Is your child now attending a special class? _____ yes _____ no _____ public _____ private.

   b. What has the special class done for ____? What changes have you noted since ___ has been attending his special class? Were these the kinds of changes which you expected? How different?

   c. What more would you hope for?

   d. How satisfied are you with what the special class has been able to do for _____?

   e. Could you suggest any improvements in the special classes?

   f. Have you ever visited a special class? _____ yes _____ no. Dates.

8. a. Do you prefer a special class program in which children live at home or in which the children stay at the school? Why?

b. What changes could be made in the day care/boarding school program so that it would be more acceptable to you?

c. Assuming your family remains intact, would you ever consider placing your child in an institution?_____ yes_____no. Why?

d. Have you ever visited a state school?____ yes_____no. (If yes, name of institution, number of visits, dates.)

e. What did you think of____? (Specific school, Faribault, Owatonna, etc.)

9. a. What do you think about what the State of Minnesota is doing to aid mentally handicapped children?

b. What non-state supported schools or agencies do you know of in Minnesota which have as their main purpose serving the mentally handicapped?

c. Can you think of any ways in which state and private schools differ in their purposes or methods?

d. If you had your choice would you prefer sending your child to a state supported or non-state supported school? Why?

e. What does it seem to you is the main purpose of agencies which are trying to aid the mentally handicapped?

f. Do you feel that this is the right way to go about it?

g. Can you suggest any changes?

h. Do you have any idea of how much a private agency might make per year? (amount)

10. a. Please tell me in your own words what the purpose of "state guardianship" is. (ward)

b. From whom or how did you first happen to hear about state guardianship?

c. Have you gotten any other information about it since then? Where?

d. Is your child now under state guardianship?____ yes____ no. Would you ever consider placing your child?

e. What made you decide to place/not to place your child?

11. a. How much do you expect___'s deficiency to handicap your child when he becomes an adult?

b. What do you think the future holds for____?

c. What specific plans have you made for the future of your child?

d. Have you any plans for the time when you will no longer be able to assist your child directly?

e. Do you expect that __will ever be able to take complete charge of his/her own affairs without any outside assistance?

12. a. What do you think is the thing for you as parents to do to aid your child?

b. What do you think is the thing for you as parents to do to aid other mentally handicapped children? (If several things mentioned in a. and b. above, get the most and least important.)

c. Are you doing anything now to aid mentally handicapped children other than your own?

d. Do you belong to any groups which are specifically concerned with the problems of the mentally handicapped?

e. Which projects are you most interested in?

f. Have you held any offices?

g. Have you worked on any committees?

13. a. What reading on mental deficiency or child care have you done?
Mention:

American Journal of Mental Deficiency
Journal of Exceptional Children
Teach Me
Infant Care
Pocket Book of Infant and Child Care
Your Child from One to Six
Your Child from Six to Twelve
Parents Problems with Exceptional Children

b. Others? Specify.

14. a. Do you happen to know what an I.Q. is?

b. Do you have any idea of what mental age means?

c. Can you tell me about what___'s I.Q. or mental age is?

d. How do you happen to know what___'s I.Q. is?

15. a. Which parent first noticed____seemed to be a little slower in developing than other children?

APPENDIX C

PARENT QUESTIONNAIRE

(See Chapter 6)

RESEARCH QUESTIONNAIRE

Note: When you need more space for any answers, you may write on the back of the sheet. Please feel free to express your ideas fully.

I. Information about parents

A. Education Please encircle the highest grade completed.

Father 8th H.S. graduate College 1-2-3-4 other______

Mother 8th H.S. graduate College 1-2-3-4 other______

B. Occupation Father's ______________________ Mother's ______________________

C. Parent's age at child's birth Father's age_____ Mother's age______

II. Information about child. Present age _____

A. Does (s)he have any physical handicaps? Please specify.

B. When did you discover that (s)he was different?

C. How did you discover this?

D. Where did you go for help?

E. What help did you get?

F. How do you feel that it could have been more helpful?

III. School

A. What schools has (s)he attended? How long in each?

B. What progress has (s)he made in the following areas? If you can, give an example for each.

1. Understanding directions

2. Playing with other children at school

3. Behaving acceptably with other adults (for example, a baby sitter)

4. Expressing his wishes and needs

5. Keeping himself occupied
   a. Use of books

   b. Use of toys

   c. Other activity

   d. Is (s)he careful not to break things?

6. Anger outbursts

7. Self-help
   a. Eating

   b. Toilet habits

   c. Dressing

IV. Home and neighborhood

A. How much freedom can you give him (her) around home?

B. How much freedom can you give him (her) around the neighborhood?

C. Are the neighbors helpful? How?

D. Do the neighborhood children:
   1. Accept him(her)?
   2. Pick on him(her)?
   3. Tease him(her)?

E. Do you fear that they might hurt him(her)? How?

F. Do you fear that (s)he might hurt them? How?

V. Future plans

A. How long do you expect (s)he will be in school?

B. How much more progress do you expect that (s)he will make in:
   1. Improving habits?

   2. Self help?

   3. Reading?

   4. Writing?

   5. Arithmetic?

C. What plans do you have for him(her) after he finishes school?

D. Do you think that (s)he can ever hold a job and be self-supporting? What kind of a job?

VI. Improving facilities

A. How do you feel about state guardianship? Now? Later?

B. What is your attitude toward a residence institution?

C. How do you feel about public education for severely retarded children?

D. Would you send your child to a public school if facilities were available?

E. Educational methods in public schools

1. At what age do you think that these children should start school?
2. At what age do you think that these children should leave school?
3. What would be a desirable number of children in each class?
4. What kind of classroom and equipment would be needed?

5. Which would you consider most desirable? Please check one.
   - a. Separate building.
   - b. Separate wing.
   - c. Separate class room and separate program.
   - d. Separate class room but participation with other children on the playground and in the building.

6. What do you think the teacher's qualifications should be?
   - a. Training

   - b. Personality

7. What would be the best way to get the children safely to school?

8. What kinds of social experience and participation should be given?

9. What academic work (reading, writing and arithmetic) should be taught?

10. What manual training should be given?

11. What do you think are the most important things that the school can teach?

12. What do you think that these children should have learned and should be able to do at the end of their schooling?

VII. Further comments and suggestions:

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